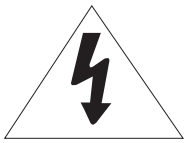
IPMD1

1M HD IP Dome Camera

User Manual

Safety Information



CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Precaution
This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Precaution
This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause excessive heat generation or fire.
4. Securely plug the power cord into the power socket. Insecure connection may cause fire.
5. When installing the camera, fasten it securely and firmly. A falling camera may cause personal injury.
6. Do not place conductive objects (e.g. screw drivers, coins, metal items, etc.) on top of the camera. Doing so may cause personal injury, fire or electric shock.
7. Do not install the unit in humid or dusty locations. Doing so may cause fire or electric shock.
8. If any unusual smells or smoke comes from the unit, stop using the product. Immediately disconnect the power source and contact the service centre. Continued use in such a condition may cause fire or electric shock.
9. If this product fails to operate normally, contact the nearest service centre. Never disassemble or modify this product in any way.
10. When cleaning, do not spray water directly into parts of the product. Doing so may cause fire or electric shock.

Precaution

Operating

- Before using, make sure power supply and all other parts are properly connected.
- While operating, if any abnormal condition or malfunction is observed, stop using the camera immediately and contact your dealer.

Handling

- Do not disassemble or tamper with parts inside the camera.
- Do not drop the camera or subject it to shock or vibration as this can damage the camera.
- Clean the clear dome cover with extra care Scratches and dust can ruin the quality of the camera image.

Installation and Storage

- Do not install the camera in areas of extreme Temperature which exceed the allowed range.
- Avoid installing in humid or dusty environments.
- Avoid installing in places where radiation is
- present.
- Avoid installing in places where there are strong magnetic fields and electric signals.
- Avoid installing in places where the camera would be subject to strong vibrations.

Important Safety Instructions

1. Read these instructions - All safety and operating instructions should be read before the product is installed or operated.

2. Keep these instructions - The safety, operating and user instructions should be retained for future reference.

3. Heed all warnings - All warnings on the product and in the operating instructions should be adhered to.

4. Follow all instructions - All operating and user instructions should be followed.

5. Clean only with a dry lint free cloth - Unplug this product from the power source before cleaning. Only use neutral detergents.

6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions - Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating.

7. Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.

8. Protect the power cord from being walked on or pinched, particularly where they exit the product.

9. Only use accessories specified by the manufacturer.

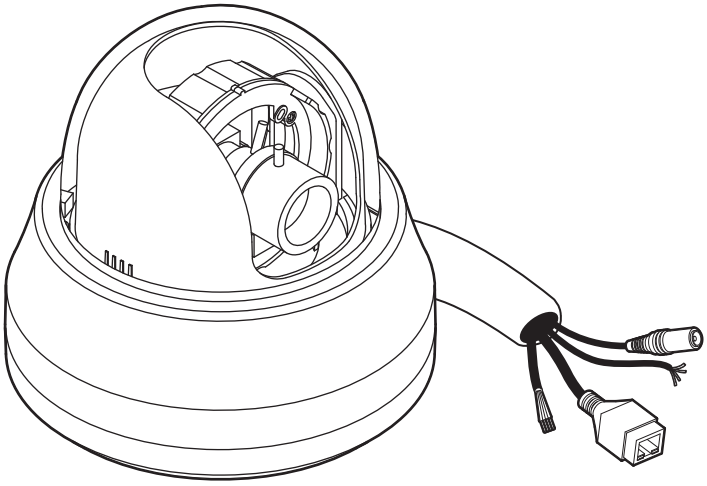
10. Only use with brackets specified by the manufacturer, or sold with the apparatus.

11. Unplug this apparatus during lightning storms or when unused for long periods of time.

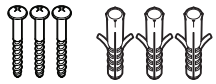
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, does not operate normally, or has been dropped.

Introduction -
Product & Accessories

※ Please check if all the camera and accessories are included in the package.



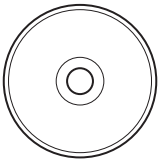
Camera



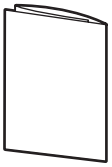
Screw & Plastic Anchor-3pcs

Test Monitor Cable

Cable

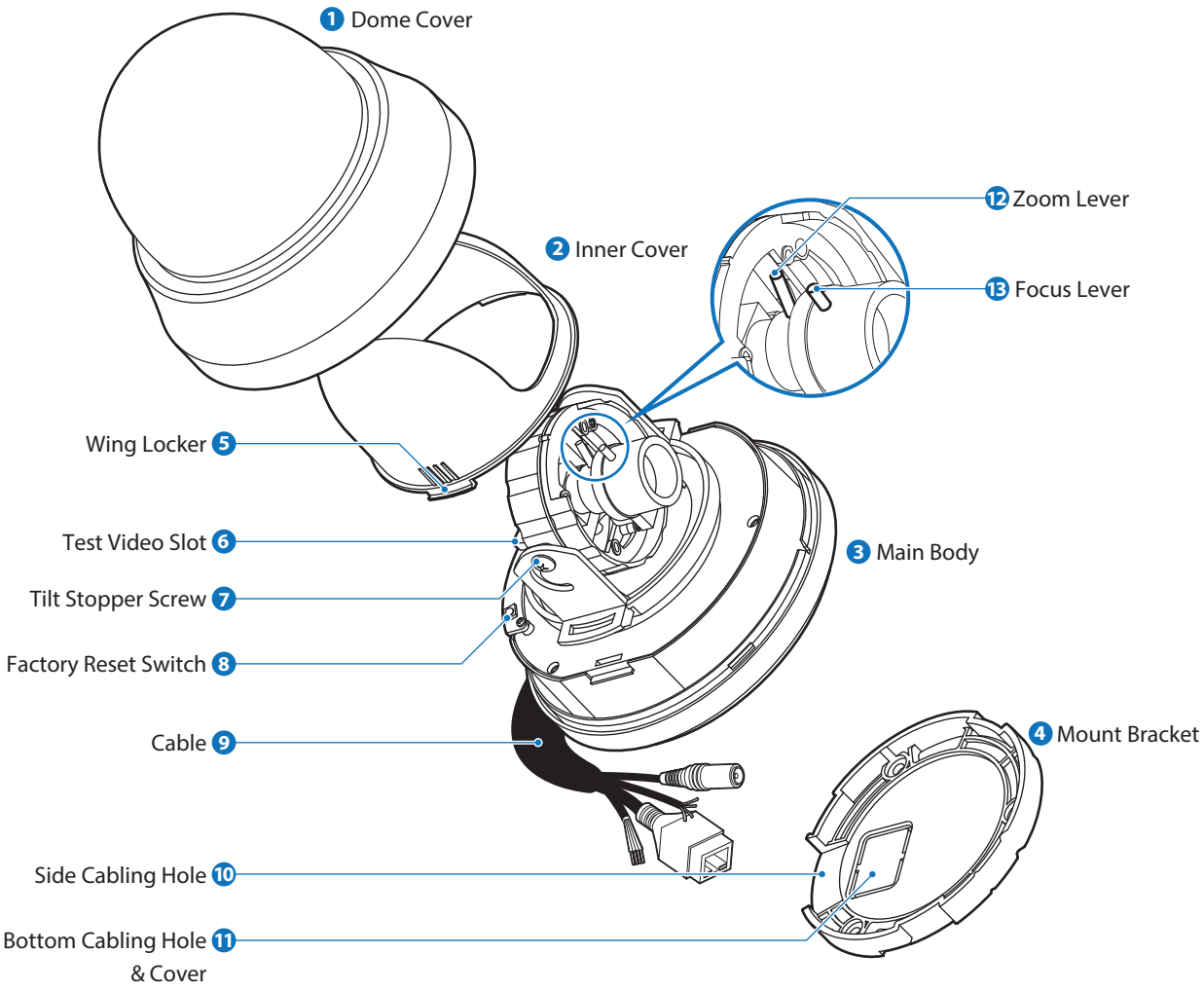


Manual CD



Quick Manual

Introduction -
Part Name & Functions



1 Dome Cover
Covers the inner cover, lens, and main body to protect them.

2 Inner Cover
Cover the main body to protect it.

3 Main Body
Includes a lens, a switch board, a PCB board, screws and such.

4 Mount Bracket
Used as a ceiling or wall fixture. It is fixed using three long tall screws provided in the package.

5 Wing Locker
Push a long thin screw driver into its narrow spot and press it inward when you want to remove the inner cover.

6 Test Video Slot
Use it to connect the Test Video Calbe.

7 Tilt Stopper Screw
Using this screw, the slope of the lens can be adjusted and fixed.

8 Factory Reset Switch
All the settings will be restored to the factory default. Power On the unit and push the switch for 5 seconds.

※ WARNING
YOU WILL LOSE ALL DATA THAT HAD BEEN ENTERED PREVIOUSLY AND THE IP DOME CAMERA WILL BE SET TO ITS FACTORY RESETS.

9 Cable
Connect the Power, Audio, Alarm, Network.

10 Side Cabling Hole
Use this hole to pass on side the cable from the main body.

11 Bottom Cabling Hole & Cover
Remove this cover to pass through ceiling the cable from the main body.

12 Zoom Lever
Using this lever, the lens zoom can be adjusted and fixed.

13 Focus Lever
The lens focus can be adjusted by rotating it left or right. Rotate it clockwise for fixing.

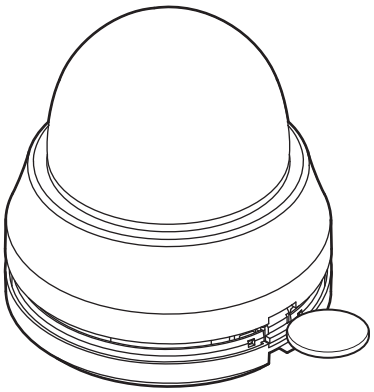
Introduction -
Specification

Model Number	IPMD1
Image Device	1/4" Omni Vision 1.0M Progressive Scan CMOS
Effective Pixels	1280 (H) x 800 (V)
Aspect Ratio	HD: 16:9 SD: 4:3
Lens	2.8-10mm Varifocal, F1.2
Horizontal Angle	96.2°(W) ~ 28.3°(T)
Min. Illuminance	Colour : 0.2 Lux @ F1.2 B&W : 0.03 Lux @ F1.2
Day & Night	Auto / Day / Night (ICR)
Shutter Speed	X2~x8, 1/60~1/10000 sec
AGC	NORMAL / MIDDLE / HIGH
White Balance	AUTO / SUNNY / SHADOW / INDOOR
BLC	OFF / LOW / NORMAL / HIGH
Sensor In/Out	Built-In 1 Input / 1 Output
Video Out	BNC: VBS 1.0 Vp-p
Approvals	FCC, CE, ROHS
Material	Plastic
OS	Embedded Linux
Video Compression	H.264/MPEG4/MJPEG
Video Streaming	CBR / VBR
Video Resolution	720p/D1/CIF/QCIF
Frame Rate	Max. 25FPS for 720P/D1/CIF/QCIF
Audio Compression	Two Way, G.711 PCM. µ-law 64kbps 8kHz
Local Storage	SDHC Memory Card (Card is not Included)
Motion Detection	Notification: FTP, E-Mail, Alarm Out, JPEG Recording on SD
Alarm	Pre-Post Alarm
Maximum Number of Clients	5
Protocols Support	IPv4, IPv6, DDNS, Security
OS Supported	Windows 7, Vista, XP, 2000
Onvif	YES
Operating Temperature	-10°C ~ 50°C
Power	DC12V 6W / POE IEEE 802.3af
Dimensions	100 Ø x 60 (H) mm
Weight	600g

Installation

Before installing your camera, you have to read the following cautions.

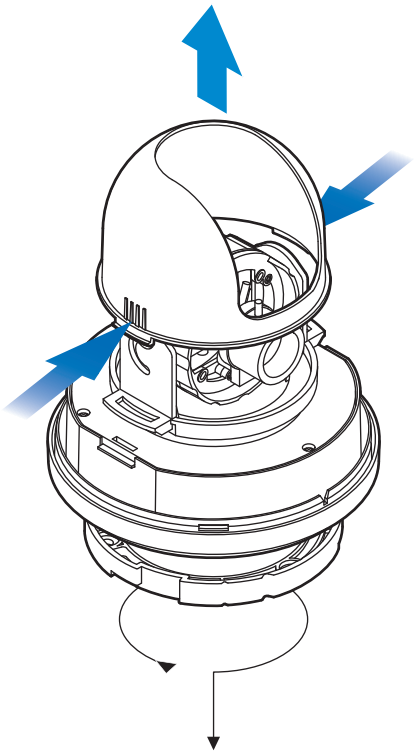
1. You have to check whether the location can bear five times of the weight of your camera.
2. Don't let the cable be caught in improper place or the electric line cover to be damaged. Otherwise it may cause a breakdown or fire.
3. When installing your camera, don't allow any person to approach the installation site. If you have any valuable things under the place, move them away.



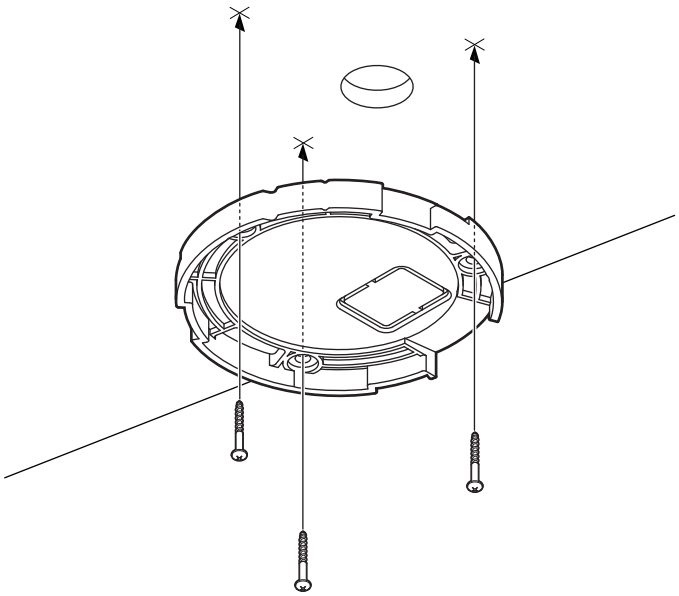
1 Disassemble the camera

Detach the dome cover from the main body by putting and turning a tool like a flathead screwdriver or a coin in the side hook of camera.

The inner cover is detached by squeezing the sides of inner cover and mount bracket is detached by turning clockwise from main body.



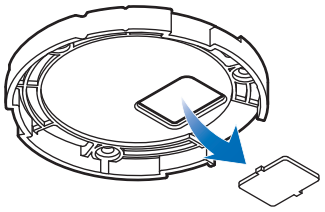
Installation

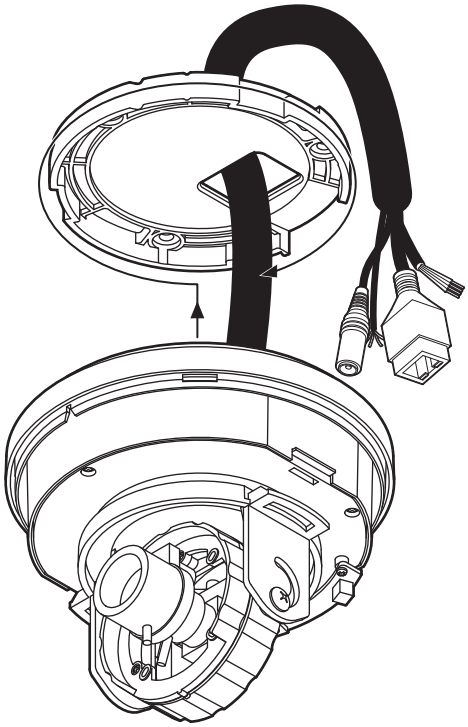


2 **Making hole on the Ceiling**

3 **Attaching mount bracket**
By tightening three screws, attach the mount bracket on the ceiling.

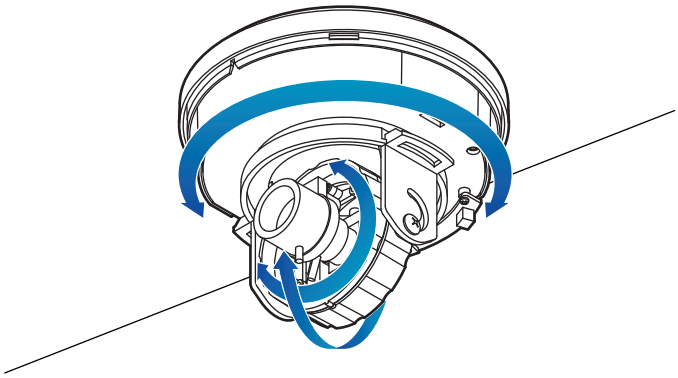
※ Remove the cover if necessary.





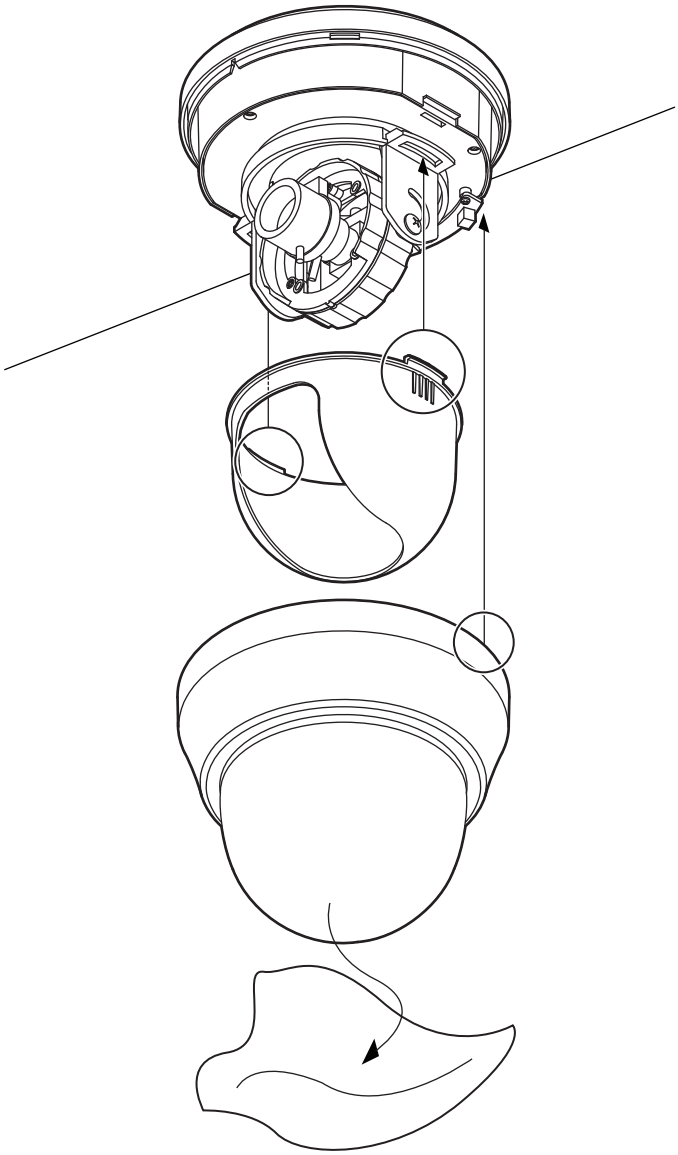
4 **Mounting Camera main body**
After passing the cables through the hole in the bottom of bracket, align the bottom of a camera main body to the fixed guide of mount bracket, and turn the camera mainbody clockwise until it fully tightened.

5 **Connecting Cables**
Connect the power, audio, alarm and network cables respectively.



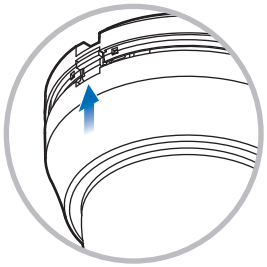
6 Adjusting Camera Angle
To achieve desired view direction and orientation, rotate 3-axis gimbal. To fix the setting, tighten the Tilt stopper screw.

7 Adjusting View angle and Focus
By turning screws of the lens, decide the view angle and adjust the focus of the video.



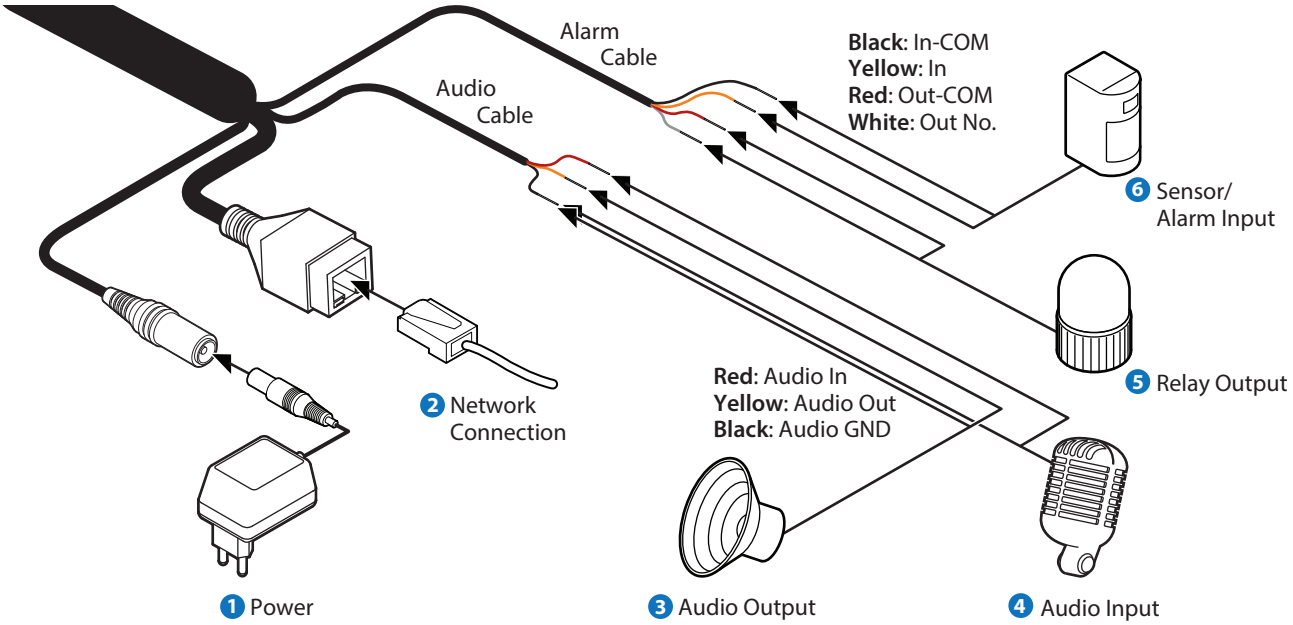
8 Attaching Inner Cover
After placing two hooks of the inner cover onto two slots in the camera main body, press inner cover upward to fix it to the main body.

9 Attaching the Dome cover
After placing the slot of dome cover on to the hook of mount bracket properly, press dome cover upward to fix it to the main body.



10 Detach the Protection Film
Detach the protection film from the dome cover.

Installation - Cabling



1 Power Connection
Please, check the voltage and current capacity of rated power carefully.

Rate Power	Current Consumption	PoE
DC 12V	6W	IEEE802.3af Class 0

2 Network Connection
Connect the crossover cable into the RJ-45.

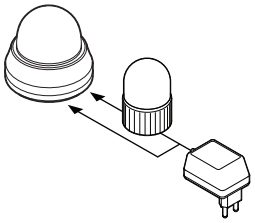
3 Audio Output
Cable of the audio output device should connect to black and yellow line of the Audio Cable.

Audio volume is controled according to the web-viewer.

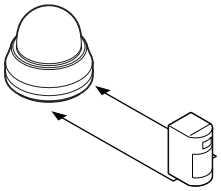
4 Audio Input
Cable of the audio input device should connect to black and red line of the Audio Cable and audio input device is activated according to the web-viewer.

5 Relay Output
It connects to the alarm lights, siren or lamps, and it is activated according to the OSD menu setting. (INTELLIGENCE > ALARM OUT)

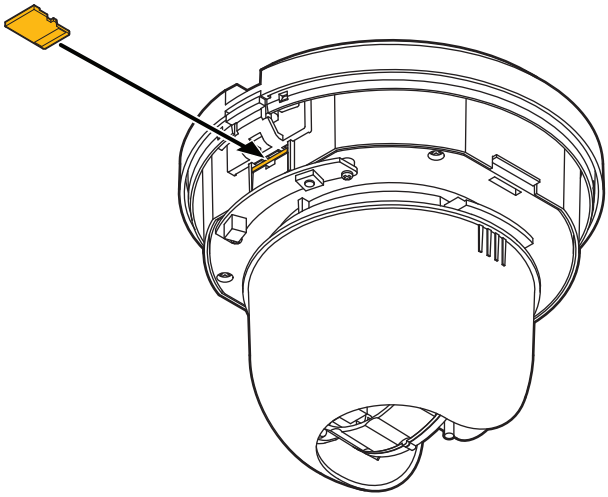
Cable of the relay output device should connect to white and red line of the Alarm Cable.



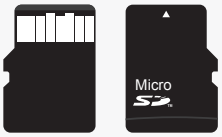
6 Sensor/Alarm Input
Cable of the sensor/alarm input device should connect to black and yellow line of the Alarm Cable.



Installation -
Inserting/Removing an SD Memory Card



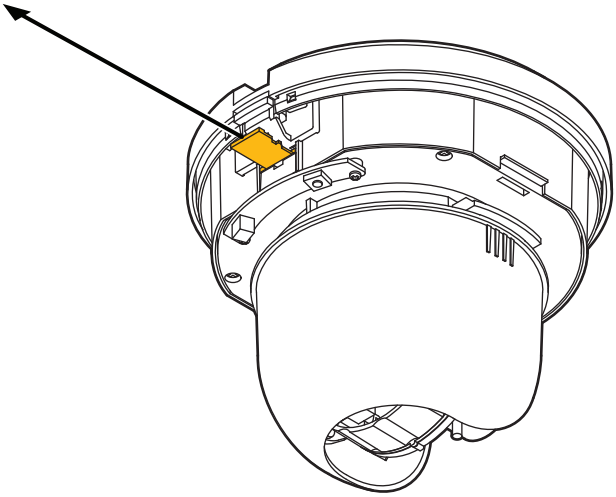
The memory card is an external data storage device that has been developed to offer an entirely new way to record and share video, audio, and text data using digital devices.



※ **Recommended SD Card Specification** ***(Not Included)***
- Type: Micro SD (SDHC)
- Manufacturer: Transcend, Kingston, Toshiba, Sanddisk
- Capacity: 4~16G
- Class: over Class 6

1 Inserting an SD Memory Card
Insert the SD card in the arrow direction.

※ Don't insert the SD memory card while it's upside down by force. Otherwise, it may damage the SD memory card.

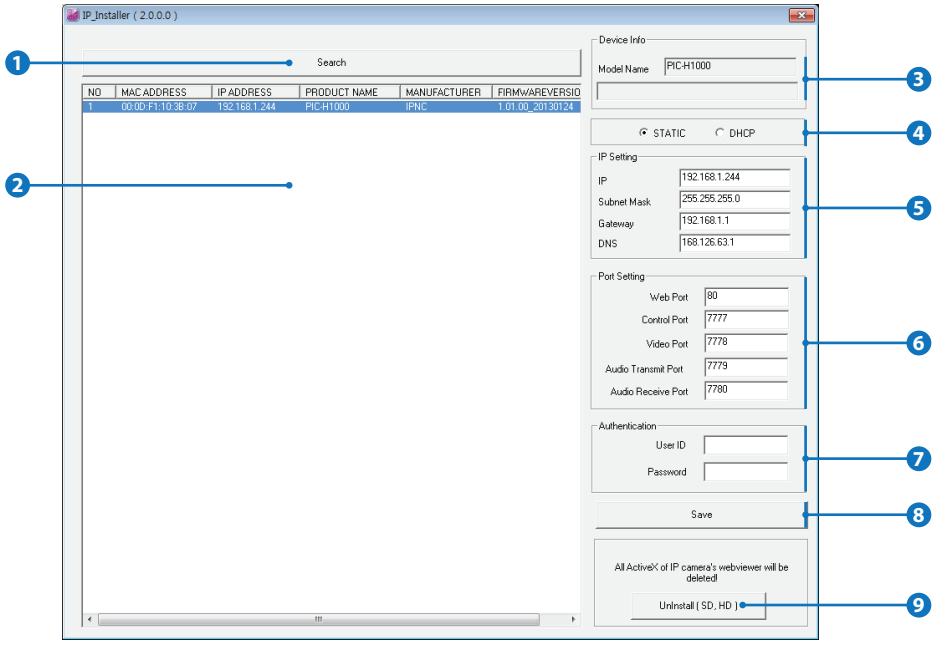


2 Removing an SD Memory Card
Removing an SD Memory Card Gently press down on the exposed end of the memory card as shown in the diagram to eject the memory card from the slot.

※ Pressing too hard on the SD memory card can cause the card to shoot out uncontrollably from the slot when released.

※ If you have saved data in the SD memory card, removing the SD memory card prior to setting record to OFF will cause damage to the data stored in the card.

Network Setup -
IP Installer

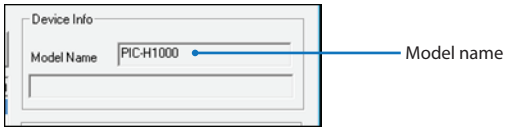


2. IP Installer details

1 Search: IP installer searches and lists all IP cameras connected to the current PC within LAN. Re-click "Search" unless all IP cameras are listed.

2 IP Camera List: Searched IP cameras are listed. By clicking it, you can see information on the camera name, IP and port setting on the right.

3 Device Info: Model name is shown.



4 Network Type: Choose Network Type.

ⓘ Normally choose Static IP. In case that it is dynamic and get it via DHCP server, choose Dynamic IP.
※ Choose Static IP when sharing IP address via IP router.

ⓘ Enter suitable information on IP address, Subnet Mask, Gateway, DNS for installation setting.
※ If it is Static IP, you can get the information from the Internet service provider.

5 IP Setting: Configure IP setting.

6 Port Setting: Configure Port Setting.

ⓘ You don't need to change the setting when connected to IP camera via IP router or within LAN. However, a port forwarding is required to allow remote access to the IP camera within LAN by external host. For the setting, refer to instructions of the IP Router.

Case 1. Connection within LAN / via IP Router,
1) Open the Internet Browser.
2) Enter an IP address and HTTP port into the address bar.
Case 2.1) HTTP default value is not 80
e.g.) IP: 192.168.1.80, HTTP: 8080
→http://192.168.1.80:8080
Case 2.2) HTTP default value is 80
e.g.) IP: 192.168.1.80, HTTP: 80
→ http://192.168.1.80

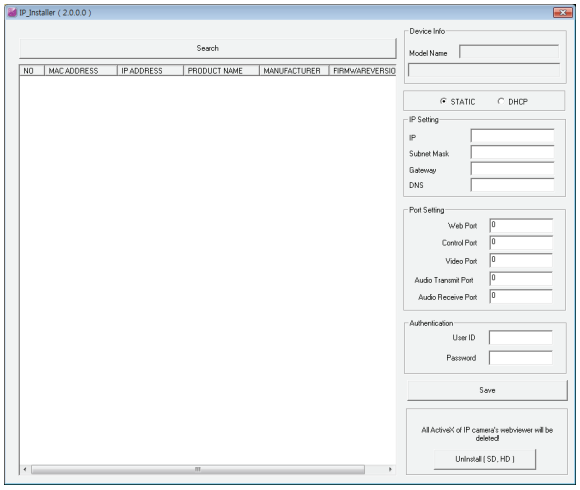
Case 2. Remote Connection by external host after port forwarding,
1) Open the Internet Browser.
2) Enter an IP address and HTTP port into the address bar.
e.g.) IP: 192.168.1.100, HTTP: 8888
→ http://192.168.1.100:8888

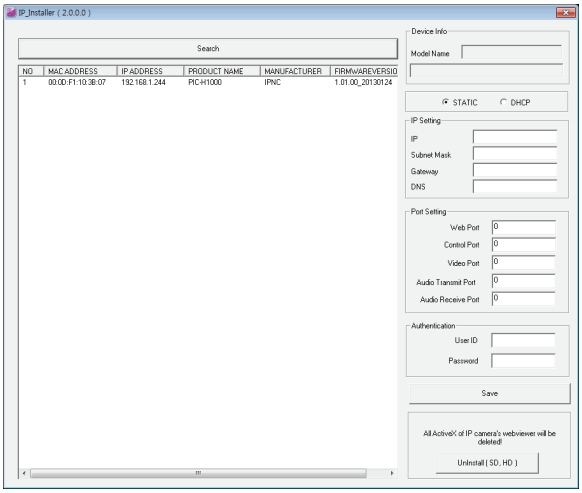
7 Authentication: Before saving settings, enter an ID and PW. Default ID and PW are admin; admin.
※ For security reasons, recommend changing the ID and PW. For configuration, go "Webviewer>Administrator tool( )>System> Users".
※ When factory reset the camera, both ID and PW are also reset.

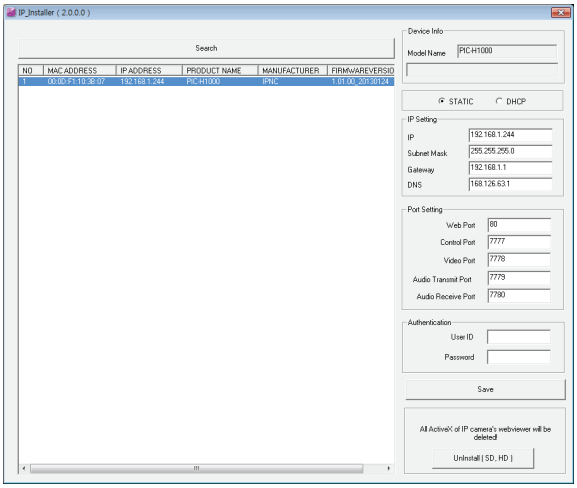
8 Save: Click this button to save all settings.
※ It takes the camera one and a half minutes and it will reboot after saving it automatically.

9 Uninstall (SD, HD): To make webviewer work, Active X should be installed to PC. The Webviewer might not be seen because of crash between previous installed one and this one. Then click this button to uninstall/remove the previous one and reinstall one of webviewer.

Network Setup -
IP Installer







1. Run IP Installer

1 Manual CD > Software > Run 'IP Installer.exe'

2 If you run the program, it will automatically search all IP cameras connected to the current PC within LAN.

3 If you click one of the lists, corresponding information on IP and port setting will be shown on the right. Enter suitable information for installation setting.

4 After changing IP and Port setting, enter ID and PW for the camera and then click the "Save" button.

※ It takes the camera one and a half minutes and it will automatically reboot after saving it.

Network Setup -
Quick Start of Network Connection

Please follow the steps below to complete the initial setup of the network function.

- Please do not power on the IP Camera until instructed.
- Temporarily disable any proxy servers configured in internet Explorer.
- If connecting the IP Camera directly to a modem, power down and reset the modem. Leave the modem powered down until configurations are finalized with the IP Camera and the IP Camera has been correctly connected to the modem.

1. In order to communicate with the IP Camera, access to PC/laptop and configure the PC.
Keep a record of TCP/IP properties of the PC. (IP address, subnet mask, gateway, DNS, etc.)

Current TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Server	
Secondary DNS Server (Option)	

- If your PC obtains its IP address automatically, there is no need to record any information.

2. Change the IP address of the host PC to 192.168.1.11 and subnet mask to 255.255.255.0 (leave all other entries blank)

3. Connect the IP Camera to your PC's Ethernet port via the supplied crossover cable. (It does not matter what end is used for the PC)

4. Power on the IP camera using the supplied power adapter.

5. After 1 minute of power, verify a flashing ACTIVE indicator and a flashing or solid LINK indicator. After the corresponding indicator lights are properly displayed, open Internet Explorer.

6. Type - http://192.168.1.80 (the default IP of the IP Camera) into your address bar.

7. Default ID/Password to access IP Camera are both the word: ***admin.***

8. Familiarize yourself with the Viewer Interface Screen.

9. Locate the TCP/IP configuration under Setup. Supply the same ID and Password to enter Setup. (***admin*** : ***admin***)

10. Select STATIC under 'Network Type'. You will select Dynamic only if you are connecting the IP Camera directly to your cable/DSL/Broadband modem and your Internet Service Provider is supplying a dynamic address.

- If you have a network with other devices (such as PC/laptop, etc.) or a router, you will NEVER select Dynamic.

11. Configure the IP Camera's TCP/IP settings as you normally do any other PCs on your network by providing a proper IP address, subnet mask, default gateway, and DNS server.

- If this is a stand-alone unit with a direct connection to cable/DSL/ Broadband modem, input the addresses you have received from your ISP. If you have received no IP address from your ISP, select Dynamic and choose the proper settings.

12. The IP Camera utilizes five TCP ports - a Web Port, a Video Port, a Control Server Port, Audio ports. A Web Port is to utilize Internet Explorer, a Video Server port is to support the streaming video, a Control Control Port is to transmit to control commands and Audio Ports are to transmit and receive Audio data. If the IP Camera will be directly attached to a cable/DSL/Broadband modem or it has been assigned a static IP from your ISP, then leave the default port settings. If you are installing the IP Camera on a network, you must define a Web Port other than 80. The other ports, a Video Port, a Control Port, Audio Ports can remain unchanged.

13. If the IP Camera is connected to a network which utilizes a router, you must have Port Forwarding configured on your personal router to forward all ports to the IP address you have assigned the IP Camera.

14. After configuring Port Forwarding on your router (if necessary), you may access your IP Camera on your local network by opening Internet Explorer and specifying the IP address and Web Port that you have assigned to the IP Camera.

- Example: http://192.168.0.200:8888
- If you leave your Web Port set to 80, you don't need to specify the port in the Address Bar to access to your IP Camera.

15. Access your IP Camera via the Internet :

If you use a static IP address assigned by your ISP

1) Open Internet Explorer.
2) Type the IP of the IP Camera.
3) If you use a router, type the routers' static IP and the web port number of the IP Camera.

If you have a dynamic address provided by your ISP

1) Open Internet Explorer and visit the DDNS website.
2) Register the IP Camera.
3) Reboot the IP Camera.
4) Give the DDNS server 10 minutes to locate your IP Camera's IP information.
5) Click the refresh button in the Internet Explore.
6) After your camera is connected, select your camera.

Network Setup -
Initial Setup via a Crossover Cable

This section provides a guide on how to connect the IP Camera to your PC/Laptop for initial setup.

Please follow the instructions in the order below without skipping steps. Do not supply power to the IP Camera until instructed.

In order to access the IP Camera's firmware you will need to connect the Video Server to a PC or Laptop directly via the supplied crossover cable.

1. Before you begin, you must determine the current network/ INTERNET (TCP/IP) settings on the PC or laptop. Write down your entries below for quick reference.

Current TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Server	
Secondary DNS Server (Option)	

- For information on how to determine your currents settings, see Appendix A.
- If you are obtaining an IP Address automatically, there is no need to write down the information.

2. To make the IP Camera to communicate with your PC, change your PC's IP address and subnet mask.

- You should change your IP address to 192.168.1.11 and change the subnet mask to 255.255.255.0

  Leave all other entries (Default Gateway, DNS Servers, etc.) blank.
- For information on how to change your IP address and subnet mask, see Appendix B.

3. After you have made the changes to your IP address and subnet mask, you may attach the IP Camera to your PC via the supplied crossover cable. Plug-in either end of the crossover cable into the PC's network card and the other end into your IP Camera.

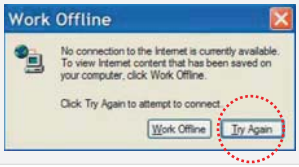
4. After connecting the PC and IP Camera using the crossover cable, power on the IP Camera by plugging in the power supply shipped with the IP Camera.

5. No longer than 1 minute after powering on the IP Camera, verify that the ACTIVE indicator light is flashing, and the LINK indicator light is flickering or solid. No longer than 1 minute after power on the IP Camera, verify that the ACTIVE indicator light is flashing and the LINK indicator light is flickering or solid. If they are not, read the FAQ.

6. Now you will be able to access the viewer software within the IP Camera.

- Open Internet Explorer and type the IP address of 192.168.1.80 (default IP of the IP Camera from the factory) into the Address Bar of the web browser (as seen below). Press Enter.

- If a message box similar to the image below appears, choose 'Try Again'. The message will vary depending on the operating system.


Work Offline
No connection to the Internet is currently available. To view Internet content that has been saved on your computer, click Work Offline.
Click Try Again to attempt to connect.
Work Offline
Try Again

7. Now you will be able to see the login screen for the IP Camera.

- The 3 authorities are available :
  Administrator, Operator and Viewer. The authority setup is available in Setup.
  - Viewer : Only monitoring is allowed.
  - Operator : Most of the functions are allowed except 'Setup'.
  - Administrator : All functions are allowed.

8. The default ID and Password are both the word 'admin' (without the " ")

9. At any time if you are prompted to download ActiveX controls, Click 'Yes' as all contents are safe.

- You will have to click 'Yes' twice to two individual prompts. This allows your video to be displayed in Internet Explorer.

Network Setup -
DDNS Registration

If you have DYNAMIC IP service from your Internet Service Provider (ISP), you can't tell the current IP address of the IP Camera. To solve this problem, you have to register to our DDNS service.

At first, you have to check if you are using dynamic addressing. If so, register your IP Video Server on our DDNS website before you configure, setup, or install the IP Camera.

Even though your IP is not dynamic, you will get benefit if you register to DDNS. In this case, just remember 'alex.net4c.net/gate1' instead of complicated series of numbers like http://201.23.4.76:8078.

For more details, contact our Support Center.

※ To register IP Camera to DDNS, 'Serial No.' of the IP Camera should be known. The 'Serial No.' can be found in section 6 'Setup - DDNS' menu.

※ To use a public DDNS called 'dyndns' or 'no-ip', refer to the detail information on how to use the service.
(Visit the web site : http://www.dyndns.com or http://www.no-ip.com)

Network Setup -
Guide to Network Environment

Please configure the IP Camera at the installation site. You must determine your network scenario in order to configure the IP Camera with the proper TCP/IP settings. This tutorial will guide you through the process. Before actually configuring the IP Camera, determine settings to be applied. Record those settings to be used to configure your IP Camera for reference.

When configuring your IP Camera, treat the IP Camera as another PC on your network. You will assign it several addresses and other TCP/IP properties to match your current network.

This step-by-step tutorial will teach what IP addresses and network configurations should be assigned based on the network scenario.

1. Before you begin, locate any information and settings received from your Internet Service Provider (ISP). You may need to refer to these IP addresses at a later time during the configuration.

Current TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Server	
Secondary DNS Server (Option)	

Static ☐ Dynamic ☐

ⓘ If you were not given any IP addresses or the ISP was responsible for the setup and installation of your Internet connection, go to step 2.

ⓘ If you are not using a router on your network, your 'Current TCP/IP Settings' (from the previous section) and 'Assigned IP Addresses from My ISP' will be exactly the same.

2. You must determine whether the IP address is STATIC or DYNAMIC. At this moment, you are only concerned about the ISP. Did they provide you with a STATIC or DYNAMIC address? If you are unsure, contact your ISP.

3. Configure your IP Camera's TCP/IP settings for network connectivity by selecting Setup from the main interface and selecting TCP/IP located on the left of the Setup screen.

4. If prompted for ID and Password, use 'admin' for both entries.

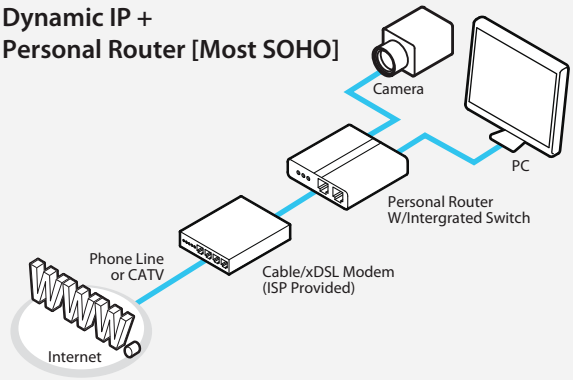
The default web port number is 80. If port 80 is blocked by the ISP, a value between 1025 ~ 60000 should be used. If TCP port 80 is blocked, consult the ISP

5. The following descriptions are several basic network scenarios. Determine which scenario describes your network. If your network does not match one of the scenarios below and you are unsure how to setup your IP Camera, contact your network administrator and then call our Support Center.

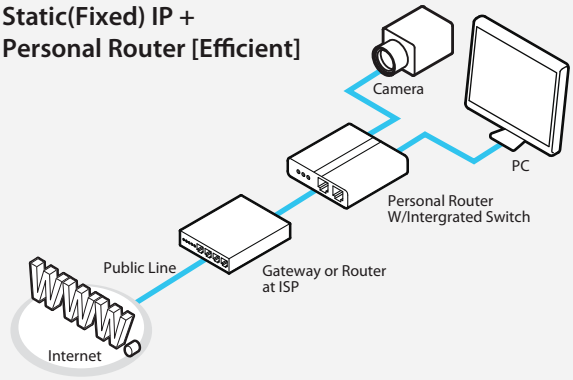
ⓘ You cannot control the rectangular gray areas and only the ISP has access to the devices.

Network Setup -
Setup Case A, B

Case A:
Dynamic IP +
Personal Router [Most SOHO]



Case B:
Static(Fixed) IP +
Personal Router [Efficient]



Configure your IP Camera's TCP/IP properties as follows :

1. Network Type : STATIC (even though you have Dynamic IP from your ISP, use STATIC on the IP Camera)

2. Internet Address : A private IP address such as 192.168.0.200 (Example)

- You need to assign an IP address to the IP Camera just as you do with PC.
- The IP address you assign must be unique to your network and match your network as well. For information on how to choose a unique IP and match your network, read the FAQ.
- The IP address you assign must be a private IP. For information on how to choose a private IP please, read the FAQ.

3. Subnet Mask : 255.255.255.0 (Example)

- You must use the same subnet mask as the one you noted under 'Current TCP/IP Settings'.

4. Default Gateway : 192.168.0.1 (Example)

- This IP address must be the IP address of your router. (private or LAN side)
- Use the same Default Gateway you noted under 'Current TCP/IP Settings'.

5. Preferred DNS Server : Use the 1st DNS Server from 'Assigned IP Address from My ISP'.

- If you did not receive any IP addresses from your ISP, contact the ISP and acquire the IP address of their DNS server.

6. DDNS Server : Use the DDNS server.

- This is the same site you will register later to accommodate dynamic IP from your ISP.

7. Web Port : 8888

- Do not use the default port 80 as this number must be changed.
- You may select any number between 1025 ~ 60000.

8. Control Port : 7777

- You may select any number between 1025 ~ 60000.

9. Video Port : 7778

- You may select any number between 1025 ~ 60000.

10. Audio Transmit Port : 7779

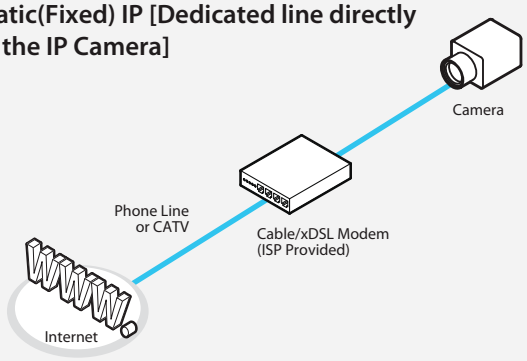
- You may select any number between 1025 ~ 60000.

11. Audio Receive Port : 7780

- You may select any number between 1025 ~ 60000.

Network Setup -
Setup Case C, D

Case C:
Static(Fixed) IP [Dedicated line directly to the IP Camera]



Configure your IP Camera's TCP/IP properties as follows :

1. Network Type : STATIC

2. Internet Address : A static IP address received from your ISP such as 24.107.88.125 (Example)

ⓘ You need to assign an IP address to the IP Camera just as you do with PC.

3. Subnet Mask : Subnet mask assigned from your ISP such as 255.255.255.240 (Example)

4. Default Gateway : 24.107.88.113 (Example)

ⓘ Use the assigned default gateway from your ISP

5. Preferred DNS Server : Use the 1st DNS Server from 'Assigned IP Address from My ISP'

ⓘ If you have not received any IP addresses from your ISP, contact them to acquire the IP address of their DNS server.

6. DDNS Server : Use the DDNS server

ⓘ This is the same site you will register later to utilize our DDNS service.

7. Web Port : 80

ⓘ You may select any number between 1025 ~ 60000.

8. Control Port : 7777

ⓘ You may select any number between 1025 ~ 60000.

9. Video Port : 7778

ⓘ You may select any number between 1025 ~ 60000.

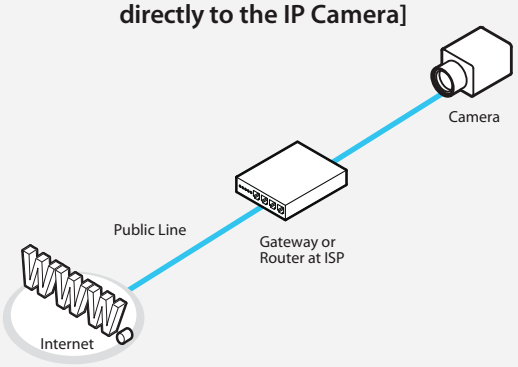
10. Audio Transmit Port : 7779

ⓘ You may select any number between 1025 ~ 60000.

11. Audio Receive Port : 7780

ⓘ You may select any number between 1025 ~ 60000.

Case D:
Dynamic IP + DSL/Cable Modem [Connected directly to the IP Camera]



ⓘ To connect the IP Camera directly to a modem, power down and reset the modem. Leave the modem powered down until configurations are finalized with the IP Camera and the IP Camera has been connected correctly to the modem. Then power on the modem, followed by the IP Camera.

Configure your IP Camera's TCP/IP properties as follows :

1. Network Type : DYNAMIC

2. DDNS Server : Use the DDNS server

ⓘ This is the same site you will register later to accommodate dynamic IP from your ISP.

3. Web Port : 80

ⓘ You may select any number between 1025 ~ 60000.

4. Control Port : 7777

ⓘ You may select any number between 1025 ~ 60000.

5. Video Port : 7778

ⓘ You may select any number between 1025 ~ 60000.

6. Audio Transmit Port : 7779

ⓘ You may select any number between 1025 ~ 60000.

7. Audio Receive Port : 7780

ⓘ You may select any number between 1025 ~ 60000.

Network Setup - Port Forwarding

After entering the correct TCP/IP settings, you are ready for 'Port Forwarding'(Cases A, B).

1. Please record the TCP/IP settings of your IP Camera for future reference. You may need this information to access your IP Camera and to configure 'Port Forwarding'.

IP Camera TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Preferred DNS Server	
DDNS Server	
Web Port	
Control Port	
Video Port	
Audio Transmit Port	
Audio Receive Port	

2. After clicking 'Apply', the system will prompt for a reboot. Please allow the system 50 seconds to reboot and accept the changes. After 50 seconds, close the configuration screen. The view will display 'Trying to Reconnect'. If the ACTIVE light on the IP Camera has gone off and is now back on again flashing, the IP Camera has rebooted. After the system reboots completely, remove the power supply from the unit and close Internet Explorer.

3. Return your PC/Laptop TCP/IP properties to their original settings.

4. Before installing the IP Camera, you must use 'Port Forwarding' on your personal router (Cases A, B).

You will need to forward 5 ports:

- Web Port
- Control Port
- VideoPort
- Audio Transmit Port
- Audio Receive Port

All the ports will be forwarded to the IP address you assigned to the IP Camera.

In the example above, you would forward:

- 8888 → 192.168.0.200
- 7777 → 192.168.0.200
- 7778 → 192.168.0.200
- 7779 → 192.168.0.200
- 7780 → 192.168.0.200

For information on how to use 'Port Forwarding', please read Appendix C.

Network Setup -
Starting IP Camera

After forwarding correctly the Web Port, Video Port, Control Port and two Audio Ports through your router (if applicable), install the IP Camera in a proper location.

1. Locate the serial number located on the label attached to the bottom of the IP Camera, you will need this for DDNS registration.

2. Connect the IP Camera to your router or cable/DSL modem (per your network scenario) via a Cat5/5e UTP Ethernet network cable.

3. Supply power to the IP Camera.

4. After 1 minute, verify the IP Camera indicators:

- ACTIVE : Flashing
- LINK : Flickering/Solid

5. After configuring Port Forwarding on your computer (if necessary), access your IP Camera on your local network by opening Internet Explorer and specifying the IP address and Web Port assigned to the IP Camera.

Examples: http://192.168.0.200:8888 or http://24.106.88.123

If you left your Web Port set to 80, do not need to specify the port in the Address Bar to access the IP Camera.

6. Access your IP Camera via the Internet :

If you use Case B, C

1) Open Internet Explorer.
2) Type the IP of the IP Camera.

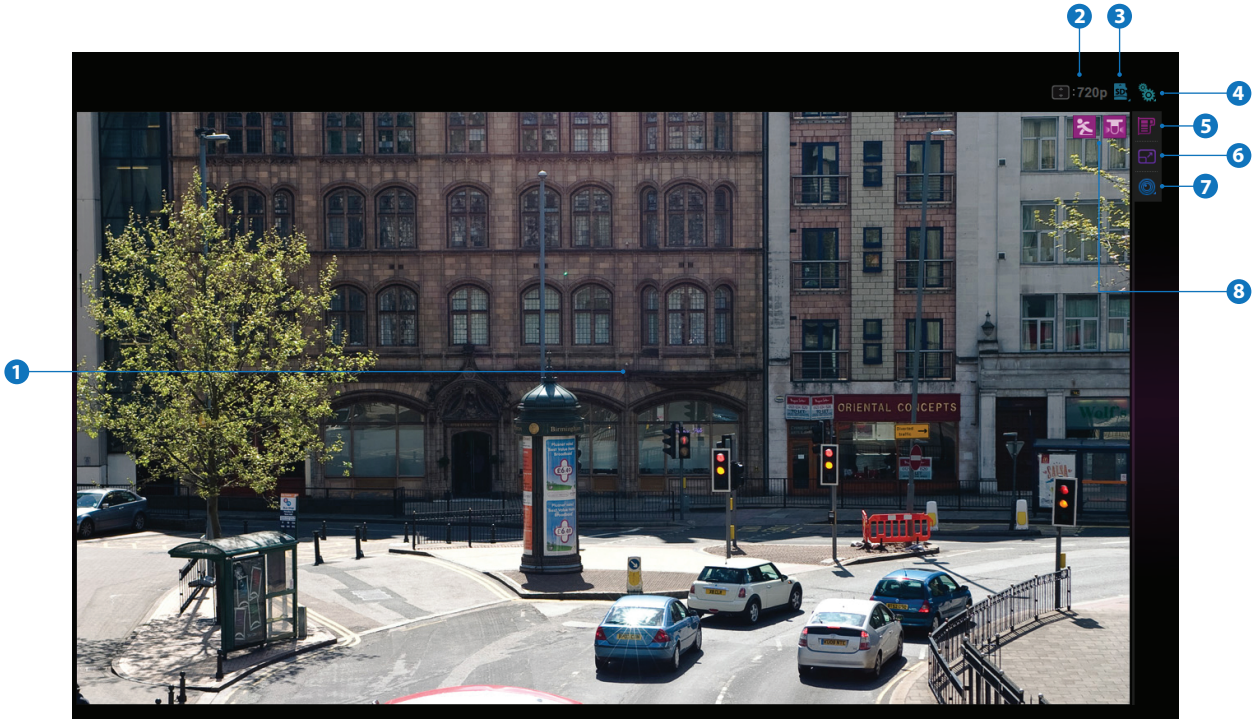
If you use Case A, D

1) Open Internet Explorer.
2) Visit the DDNS website.
3) Register the IP Camera.
4) Give the DDNS server 10 minutes (MAX) to locate your IP Camera's IP information. You may reboot the server to send an immediate request to our DDNS server.
5) After your camera is connected, select your camera.

The difference between B and C is that B needs to set the port forwarding.

Since the type of DDNS differs from the service type, refer to the related service site.

Web Viewer Screen -
Basic Screen



※ Web viewer is optimized with Windows XP or above version and explorer browser.

1 Live video display. This is the region for live video stream from the camera.

2 Resolution. The resolution of video that displays currently on the screen.

3 SD Card Search. Searching or Playing the Image which stored in the SD Card.

4 Setup popup button. Click it to open the Setup page to setup details of IP camera like Video, Network, Events, System and etc. See the section 'Setup'.

5 Control tab button. Click it to extend the panel to control the function of web-viewer. See the next page for detail.

6 Full screen button. Click it to extend the live video to full screen. To return to normal mode, press 'Esc' or 'Enter' key.

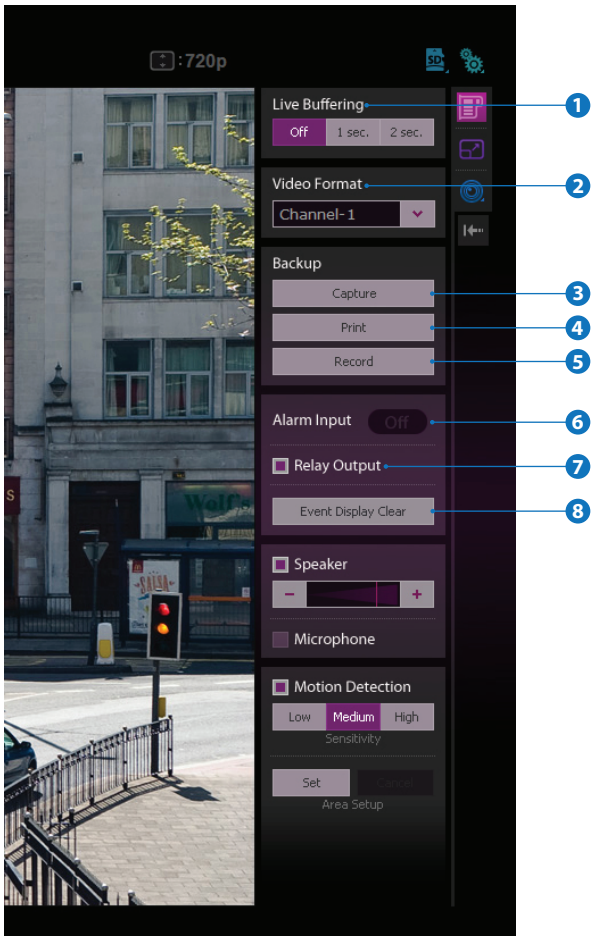
7 Camera Setup popup button. Click it to open the Setup page to setup details of Lens, White Balance, Auto Exposure, image Backlight and etc. See the section 'Camera Setup'.

8 Event alert icon. If Alarm in and Motion detection are detected, below icons will appear.

<Alarm Input>

<Motion Detection>

Web Viewer Screen - Control Tab



1. When the image goes unsmoothly because of bad network connection, it stored image during setup time and shows the image on the live view screen.
   - User will see the delayed images as much as setup time.

2. Video stream button. Select a stream produced from the camera between Stream 1 ~ 3 to display it in the live view screen.
   - Refer the 'Setup > Basic > Video' to setup the Video Stream.

3. Capture button. Capture the live video in the form of BMP or JPG file. The location and file name of image can be decided after clicking this button.
   - Refer the 'Setup > Basic > Backup' to setup the type of Image.

4. Print Button. Print current live image to the printer connected to the PC.

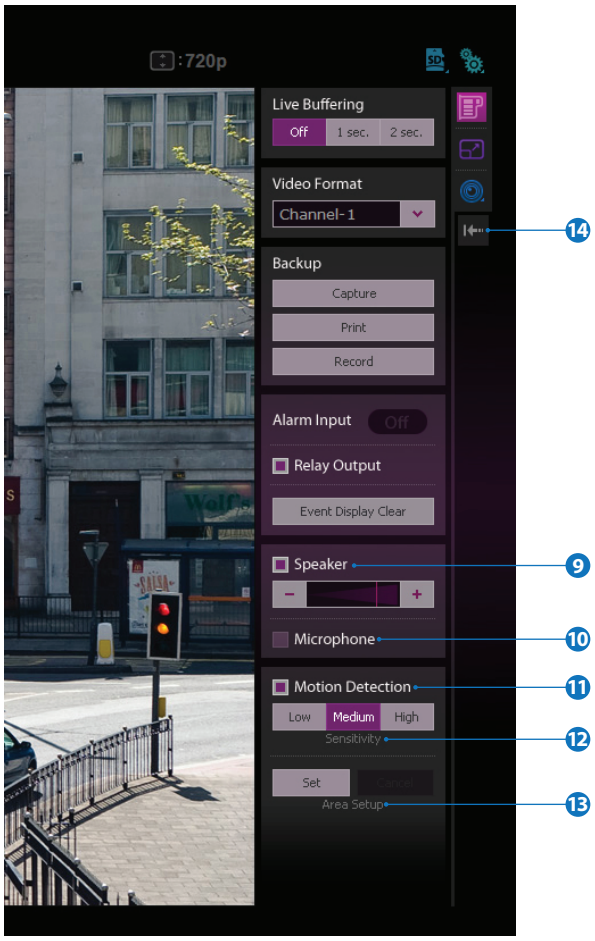
5. Record Button. If you click this button, the current live video will be stored as AVI format file in your PC. During the recording, you cannot change the Video Format. If you change the Video Format, the recording will be stopped automatically.

6. Alarm Input Status. It shows the Alarm Input status. If the status of alarm input becomes On state, the 'Off' button will be changed to 'On' button and event alert icon( ) is displayed on the 'Live video display'. If alarm is removed, the alarm input status is reset.
   - Regardless of alarm status, the Alert Icon will remain unless 'Event Display Clear' button is clicked.

7. Relay Out Button. Enable or Disable relay out function.

8. Event Display Clear Button. Remove Event Alert Icons result from Alarm Input or Motion detection.

Web Viewer Screen - Control Tab



9 Speaker Control. Enable/Disable Audio stream received from the camera and Volume control of the speaker in the computer.

10 Mic Control. Enable/Disable the Audio stream to the camera.

11 Motion Detection. Enable or Disable motion detection function. 'Area Setup' below must be done in advance.

Event Alert Icon( ) appears on the screen if 'Motion Detection' is activated. Icon will remain unless 'Event Display Clear' button is clicked.

※While the motion detection is activated, this function is de-activated momentarily if the OSD and OSD menu is shown on the screen. Then, it is re-activated when the OSD and OSD menu is disappeared.

12 Sensitivity. Define the sensitivity of motion detection. If High is selected, it will detect very small motion while it becomes relatively insensitive when Low is selected.

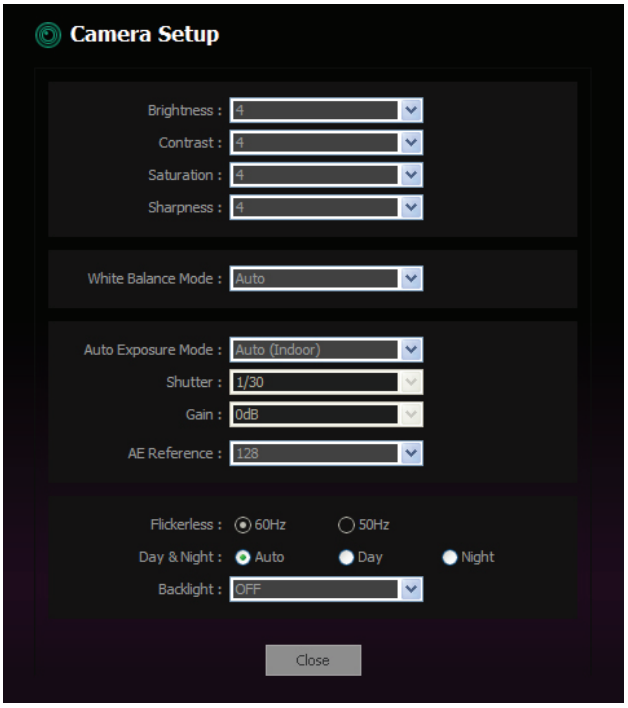
13 Area Setup. Setup the target area of motion detection.

<How To Setup>
1) If 'Set' button is clicked, Live screen shows grids to help area setup.
2) By clicking or dragging mouse on the grids, create or erase the masks on the main view.
3) Motion detection is effective in the masked Area.
4) Save setting by clicking 'Save' button.

※Area Setup is possible only on the Ch No.1 in the 'Video Format'. If you change the video format, motion detection area will return the setup to the default.

14 Hide Button. Hide all control panels extended.

Camera Setup -
Camera Setup



Bright

Contrast

Saturation

Sharpness

White Balance Mode
Auto: The camera performs white balance automatically.
Indoor: WB will be done under the assumption of the Indoor illumination.
Outdoor: WB will be done under the assumption of the Sun light.

Auto Exposure Mode
Auto(Indoor/Outdoor): The camera adjust the exposure under the assumption of the sun light or Indoor illumination by itself automatically.
Shutter Priority: The shutter speed can be selected by the user while iris and gain are controlled by camera automatically.
Manual: Shutter speed and Gain can be adjusted by users according to their preference.

Shutter
The slower the shutter setting, the brighter the image is. However, the haunting can happen on the image when the object is moving fast.

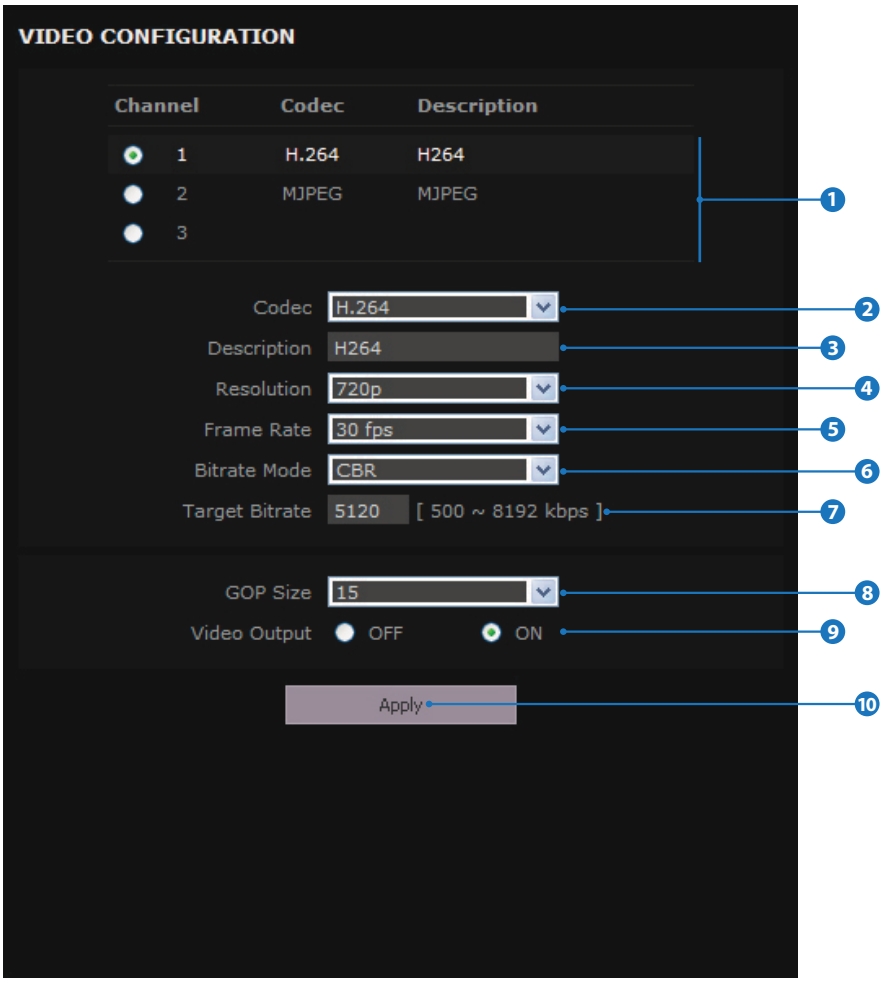
Gain
The smaller number makes the daker image.

AE Reference
It is a theshold value to adjust exposure automatically when AE Mode is Auto.

Day & Night
Day: In this mode, the IR cut filter is applied to the image sensor all the time. Thus, the sensitivity will be reduced in the dark light condition but the better color reproduction performance are obtained.
Night: In this mode, the IR cut filter on the image sensor is removed all the time. The sensitivity will be enhanced in the dark light condition but the image is black and white.
Auto: In this mode, the IR cut filter is removed automatically depending on the light condition around.

Backlight
When the background is too bright or the object is too dark, the backlight compensation will make the target object look clearer.

Setup -
Video Setup



1 Live Video Channel Setup

Setup the multiple codec and Video according to the environment of installed camera. Using selected channel on the 'Web-Viewer > Control Tab > Video Format'.
CH No.1 and No.2 are the default CH, so they can't be changed. However, detailed category of default codec can be setup. CH No.3 is the user channel, and codec and detailed category of codec can be setup.

2 Codec

Choose the video codec. According to the selected codec, the subcategories can be changed automatically.

3 Description

Input the additional description about the selected channel. Max. 15 alphabets are allowed(Including space). For the description, English Alphabets, numbers and special characters (/ ~ ` ! @ $ ^ ( ) _ - { } [ ] ; ,) can be used.

4 Resolution

Select the video resolution.

※ Available resolution can be depends on the codec setup between the channels.

	NTSC	PAL
1080p/i	1920 x 1080	1920 x 1080
720p/i	1280 x 720	1280 x 720
D1	720 x 480	720 x 576
4CIF	704 x 480	704 x 576
CIF	352 x 240	352 x 288
QCIF	176 x 120	176 x 144

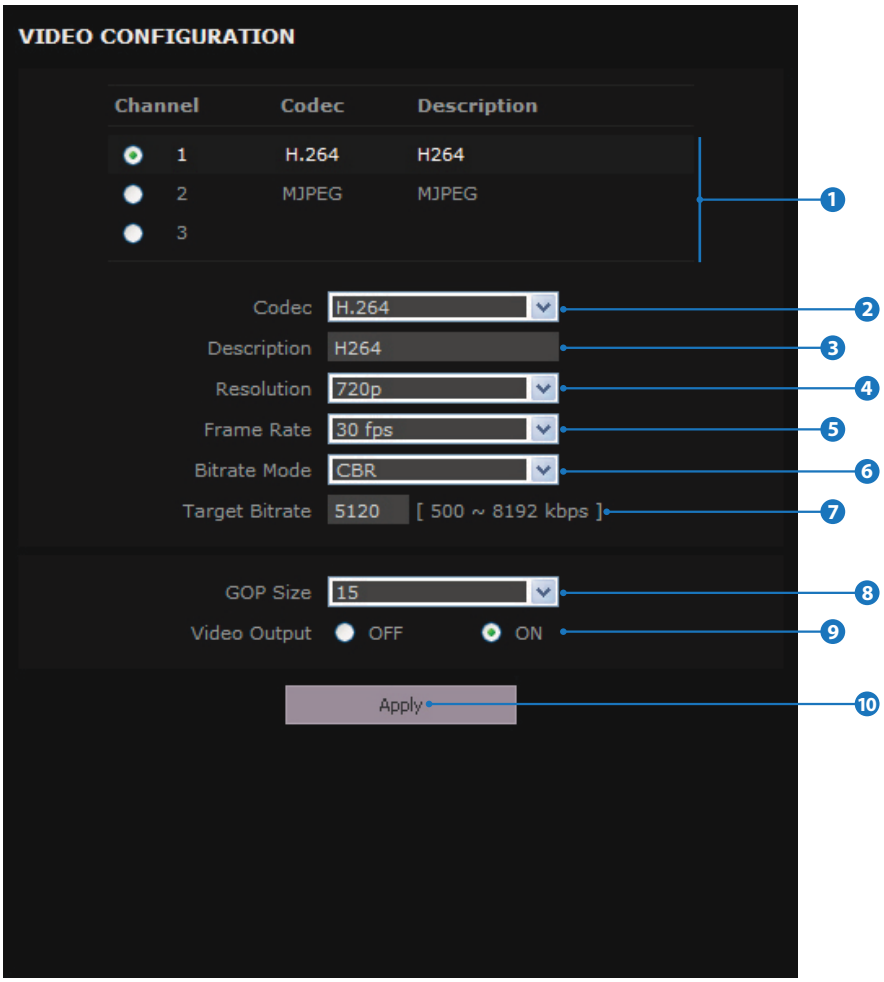
<Resolution of Video Format>

5 Frame Rate

Select the maximum Frame Rate.

※ Available Frame Rate can be different although same codecs were set up.

Setup -
Video Setup



6 Bitrate Mode
Select the bit rate control scheme of video compression from CBR (Constant Bit Rate) or VBR (Variable Bit Rate).

CBR
To guarantee the designated constant bit rate, the quality of video are controlled in this mode. Therefore, the quality of video is likely to be varying when network traffic is changing.

VBR
To guarantee the designated quality, the bit rate of video stream is changed in this mode. Therefore, the frame rate of video is likely to be varying when network traffic is changing

※ This category won't be appear if you select the codec.

7 Target Bitrate
If Bitrate Control is set to be CBR, you can set the Target Bitrate.

Quality
For VBR control mode, The Target Quality of video can be setup.

8 GOP(Group of Pictures) Size
Set up the number of frames (P-frame) which contain only changed information based on basic frame (I-frame). Regarding videos with lots of movement, if you set GOP size bigger, only the number of P-frames is bigger. As a result, video resolution will be low but 'File size' and 'Bit-rate can be decreased.

※ GOP(Group of Pictures) Size is..
I-frame and P-frame can be created for MPEG4 and H.264 video compression. I-frame(=key-frame) means the whole image data for one specific scene of video. P-frame is image data which has been changed information compared to I-frame GOP is made up of one I-frame and corresponding several P-frames. To improve video quality, set the number of P-frames smaller and to decrease image size, set the number of P-frames bigger.

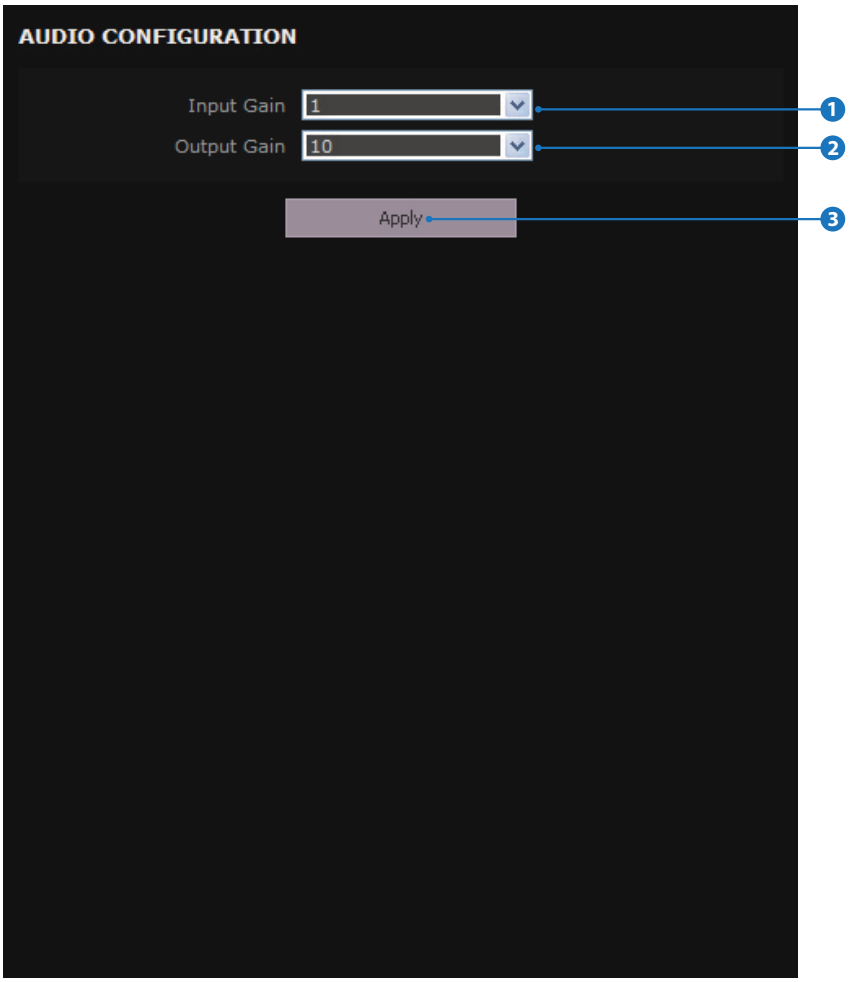
9 Video Output(*Optional Function*)
To check the display output status during the installation, 'On' status is required.

※ Recommend 'Off' status after installation.

10 Click 'Apply' to make above setting effective.

※ Click this button when completed setup each channels.

Setup -
Audio Setup

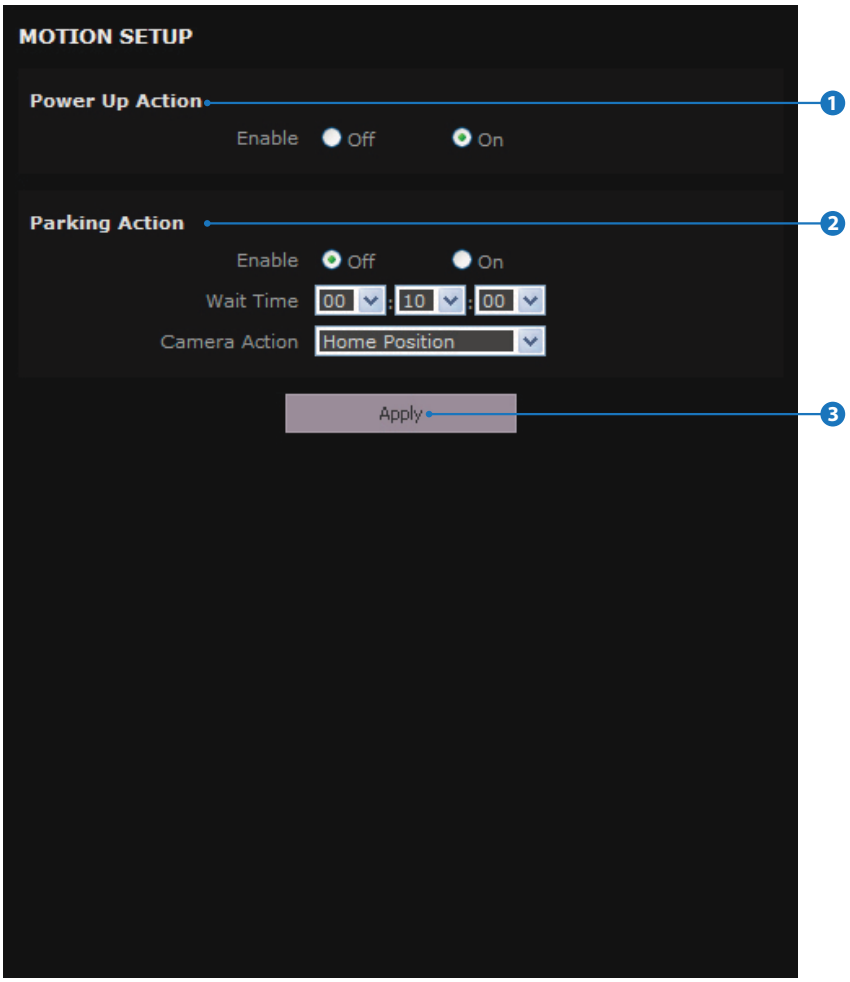


1 Input Gain
Adjust the input gain of audio.

2 Output Gain
Adjust the output gain of audio. Output gain 0 is mute.

3 Click 'Apply' to make above setting effective.

Setup -
Motion Setup



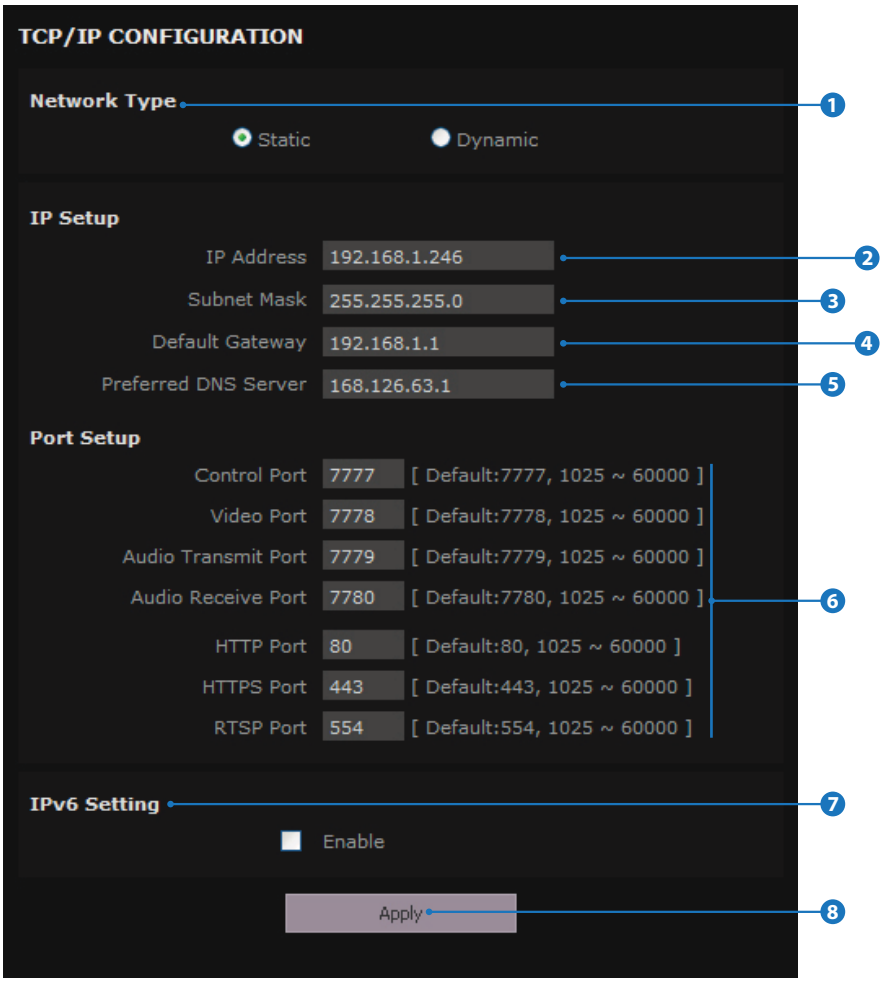
1 Power Up Action
This function enables to resume the last action executed before power down. Most of actions such as preset, pattern, scan and group are available for this function but jog actions are not available to resume.

2 Parking Action
If 'Enable' is set to 'On', camera runs assigned 'Camera Action' automatically if there is no PTZ command during assigned 'Wait Time'.

- See the section 'Web Viewer Screen_Auto map' for details of Preset, Pattern, Scan, Group.
- Home Position mean default position of camera and it can't be set by user.

3 Click 'Apply' to make above setting effective.

Setup -
TCP/IP Setup



1 Network Type
Define network IP address type from the Static Mode for the fixed IP or the Dynamic Mode by the dynamic IP address. If you select the Static Mode, you must fill out IP Address, Subnet Mask, Gateway, DNS Server and all ports. If you select the Dynamic Mode, the IP address will be allocated automatically by DHCP equipment. If you click the Apply button to update changes, the system will be re-booted. In this case, you have to reconnect the camera using new IP address.

2 IP Address
Define the IP address. The address is consisted of four numbers separated by dots and the range of each number is from 0 to 255.

3 Subnet Mask
Define the Subnet Mask. Format is same as the IP address.

4 Default Gateway
Default the Gateway IP Address. Format is same as the IP address.

5 Preferred DNS Server
Define the DNS server IP address. Format is same as the IP address.

6 Port
There are five ports in the camera providing different services. To get those services separately, unique port number must be assigned to each servers.

7 IPv6 Setting
Create the IPv6 address. If you click the Apply button after checking the Enable check box, the system will be re-booted. If you re-visit this screen after finishing reboot, IPv6 address will be shown.

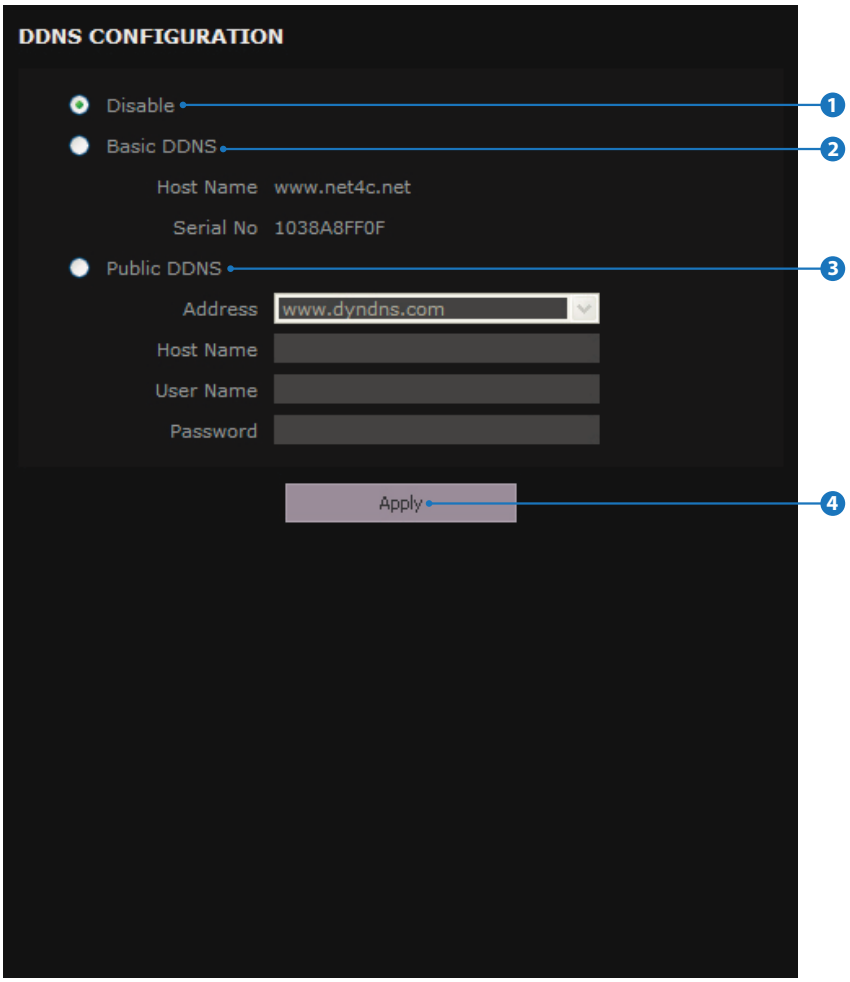
※ To use IPv6, network camera has to connect with the router for IPv6.

8 Click 'Apply' to make above setting effective.

※ If the network type is dynamic, the IP address is changed in below cases. Therefore, the IP address needs to be searched again, and the camera needs to be reconnected in these cases.

- When the camera power is on/off.
- After Firmware update, Default set and reboot.

Setup -
DDNS Setup



1 DDNS Disable
If it is selected, DDNS service does not work.

2 Basic DDNS
Please register the camera in net4c site so as to use net4c DDNS. Insert the serial number shown on the screen in the serial entry field.

3 Public DDNS
To use public DDNS service, select a site address listed in the list. After filling out the Host Name of the site, the setup is completed by entering User Name and Password registered in that DDNS site.

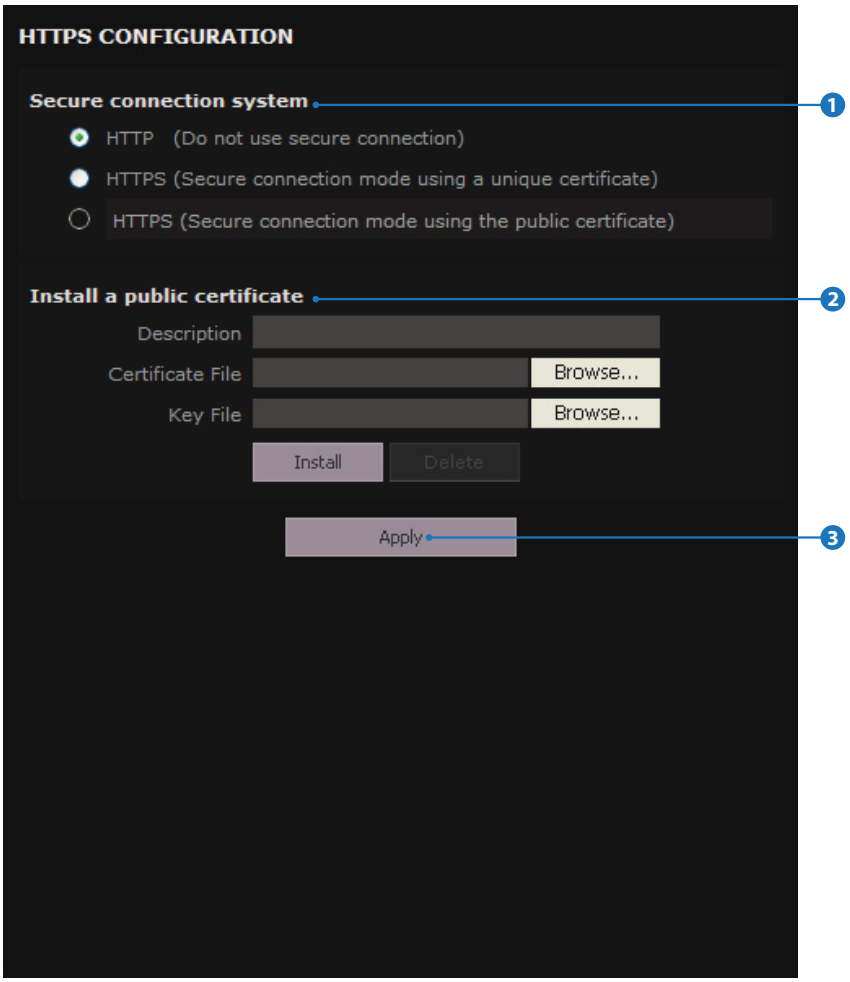
DDNS Provider	Site Address
DynDNS	www.dyndns.com
No-IP	www.no-ip.com

※ If you setup DDNS properly, the IP address of your camera will be updated automatically whenever IP address is changed or system is rebooted.

※ If IP updating to DDNS site is failed, camera will keep retrying in 1min. interval.

4 Click 'Apply' to make above setting effective.

Setup -
HTTPS Setup



1 Secure Connection System

Secure Connection System chooses a method of security connection.

HTTP
HTTP mode does not use a security connection method.

HTTPS (Secure connection mode using a unique certificate)
This mode is a security connection method which uses the (temporary) certificate in the camera.

HTTPS (Secure connection mode using the public certificate)
This mode is a security connection method which uses a certificate issued by certificate authority.

※ HTTPS (Secure connection mode using the public certificate) method can be selected only if a certificate has been already installed.

※ When HTTPS mode is chosen, input https://<IP Address> to connect to the camera.

2 Install a public certificate

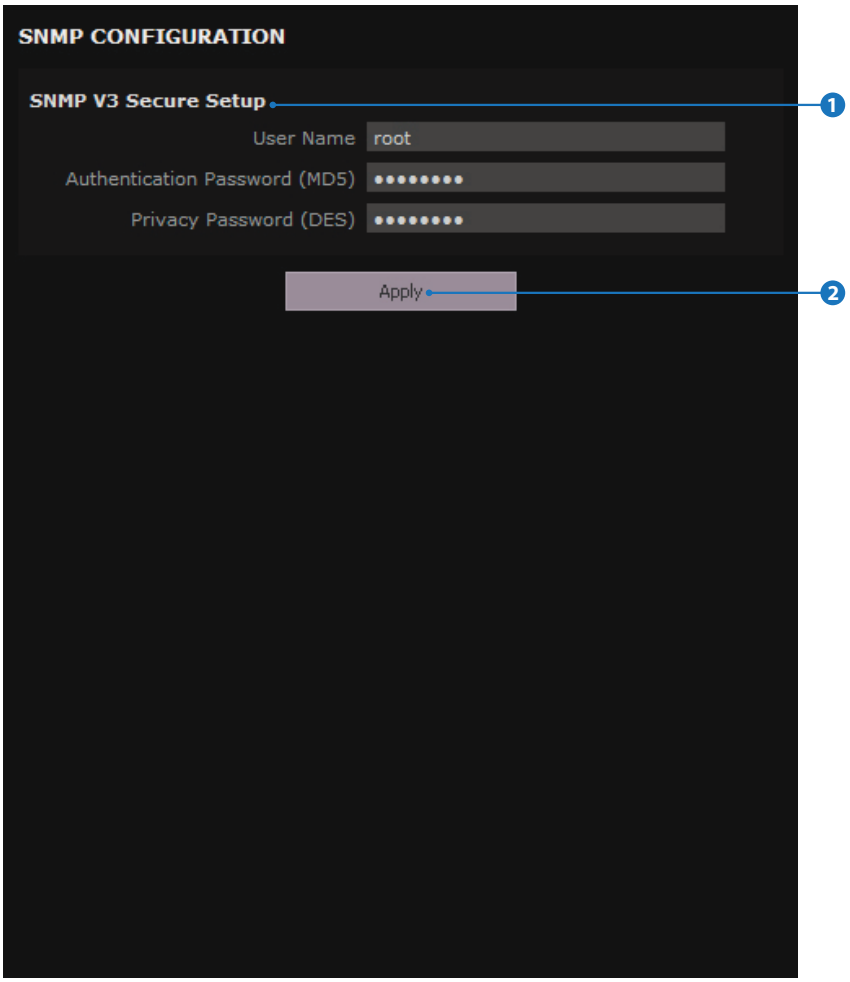
A certificate issued by Certificate Authority can be installed to the camera and the installed certificate can be deleted.

<How to install or delete the certificate>
1) Input the description(name) of a certificate.
2) Click 'Install' button after selecting the certificate files and key file to be installed.
3) To remove the certificate files, click 'Delete' button.

※ While using HTTPS (Secure connection mode using the public certificate) method, the certificate cannot be deleted.

3 Click 'Apply' to make above setting effective.

Setup -
SNMP Setup



1 SNMP V3 Secure Setup

- The information of camera system can be known and configured with SNMP.
- The changes for configuration use version 3 and username and password should be certified at that time.

Username
Username is the information of user account for user authentication.

Authentication Password(MD5)
The Authentication Password (MD5) is an encryption for authentication and they are at least 8 digits and up to 30 digits allowed.

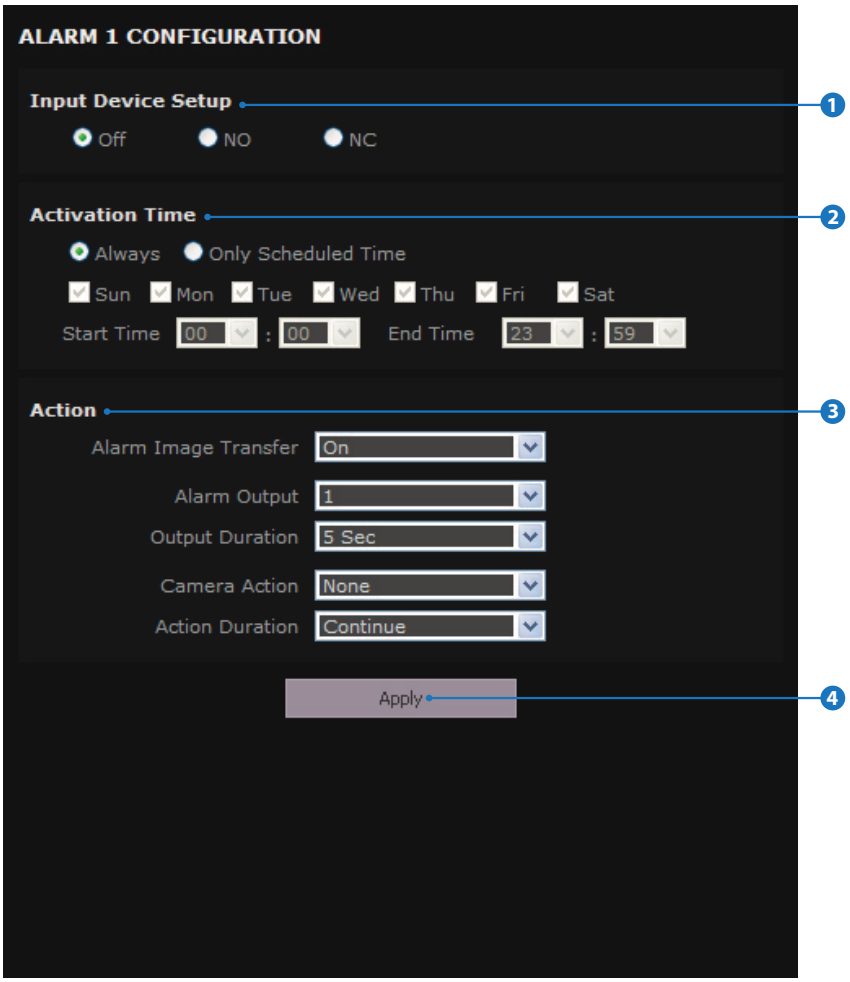
Privacy Password(DES)
Information protection password is a private encryption and they are at least 8 digits and up to 30 digits allowed.

2 Click 'Apply' to make above setting effective.

Setup - Status

This menu will show you all the information of Network setting in the camera. However, you cannot change those here.

Setup -
Alarm Input Setup



1 Input Device Setup

Select input device type from OFF / N.O. / N.C.

	Operation
Off	Ignore this Input sensor.
NO	The contact is normally open and closed when activated.
NC	The contact is normally closed and open when activated.

2 Activation Time

Select activation time from Always / Only Scheduled Time.

Always	An alarm event is activated whenever sensor Input is detected.
Only Scheduled Time	An alarm event is activated only when sensor input is detected during the scheduled time.

※To setup the schedule, you need to define Start time and End time followed by selecting Days.

※If End time is earlier than Start time, End time is regarded as next day.

Ex) Assume you select Tue. If you set Start time as 16:00 and End Time as 09:00, Alarm Input will work from 4:00pm Tue to 9:00am Wed.

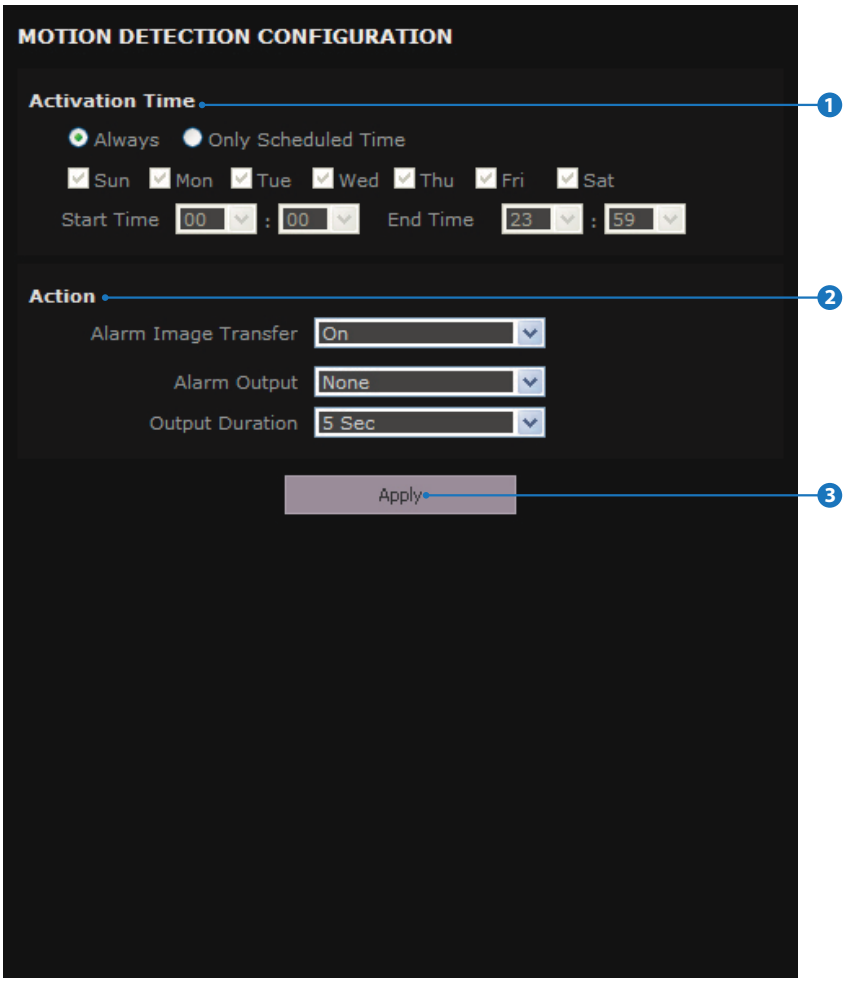
3 Action

Define a counter action from Alarm Output / Alarm Image Transfer / Camera Action when Alarm Input is detected.

Action	Description
Alarm Image Transfer	Turn ON / OFF Image Transfer. Send image via E-mail or FTP server. (For more detail see Transfer Setup in this chapter)
Alarm Output	Activate alarm out (relay).
Output Duration	Select time duration to maintain output.
Camera Action	Setup the Camera Action when Alarm in.
Action Duration	Select time duration to maintain action.

4 Click 'Apply' to make above setting effective.

Setup -
Motion Detection Setup



1 Activation Time

Select activation time from Always / Only Scheduled Time.

Always	An alarm is activated whenever motion is detected.
Only Scheduled Time	An alarm event is activated only when motion is detected during the scheduled time.

- To setup schedule, you need to define Start time and End time followed by selecting Days.
- If End time is earlier than Start time, End time is regarded as next day.
  Ex) Assume you select Tue. If you set Start time as 16:00 and End Time as 09:00, Alarm Input will work from 4:00pm Tue to 9:00 am Wed.

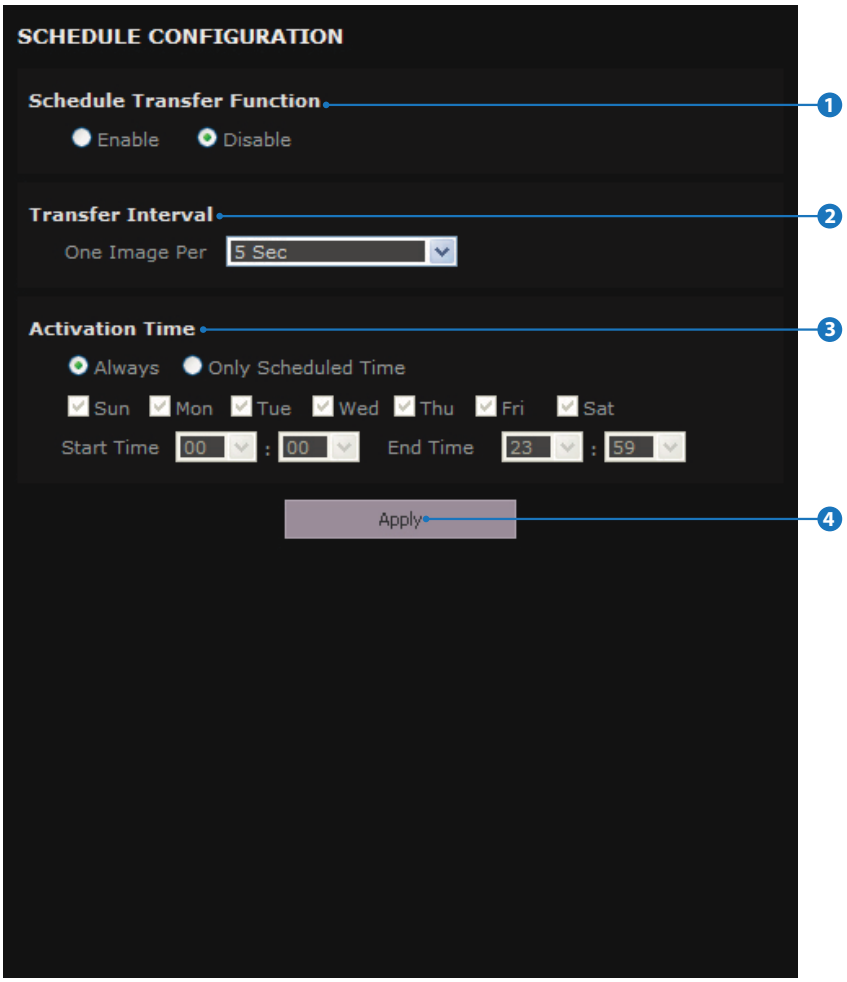
2 Action

Define a counter action from Alarm Output / Alarm Image transfer when motion is detected.

Action	Description
Alarm Image Transfer	Turn ON / OFF Image Transfer. Send image via E-mail or FTP server. (For more detail see Transfer Setup in this chapter)
Alarm Output	Activate alarm out (relay).
Output Duration	Select time duration to maintain output.

3 Click 'Apply' to make above setting effective.

Setup -
Schedule Setup



Schedule function enables to transfer series of still images in a time interval specified via E-mail or FTP. (For more detail, see 'Transfer Setup' in this chapter)

1 Enable / Disable
Set Schedule function to be enabled or disabled. Schedule function enables to transfer series of still images in a time interval specified.

2 Transfer Interval
Define time interval of image transfer.

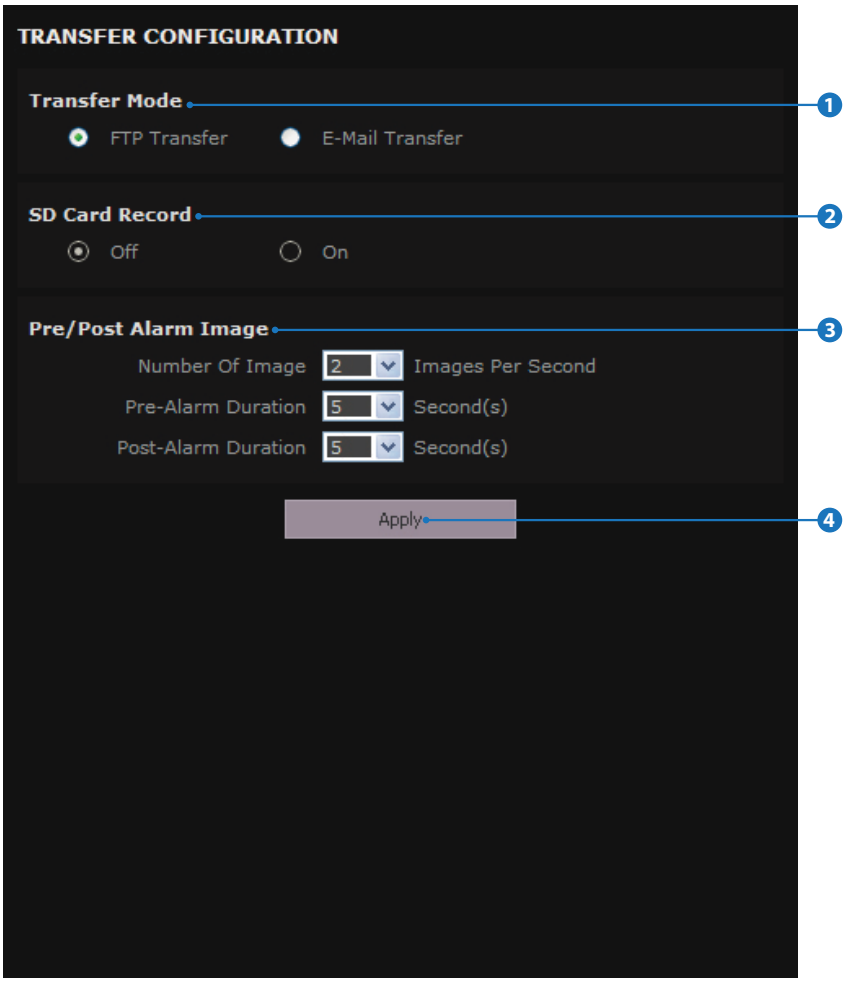
3 Activation Time
Select activation time from Always / Only Scheduled Time.

Always	Transfer image at all times.
Only Scheduled Time	Transfer image during the scheduled time.

- To setup 'Only Scheduled Time', you need to define Start time and End time followed by selecting Days. The setup schedule is repeated every week.
- If End time is earlier than Start time, End time is regarded as next day.
  Ex) Assume you select Tue. If you set Start time as 16:00 and End Time as 09:00, Alarm Input will work from 4:00pm Tue to 9:00am Wed.

4 Click 'Apply' to make above setting effective.

Setup -
Transfer Setup



1 Transfer Mode

Image Transfer method is selected from FTP and E-Mail (SMTP).

※ To use image transfer, FTP and SMTP in the next sections must be configured properly.

2 SD Card Record

If it is set to On, the image is saved into the SD card as well.

※ It will setup OFF automatically when SD card doesn't applied. The SD card setting can be configured on the SD CARD section.

3 Pre/Post Alarm Image

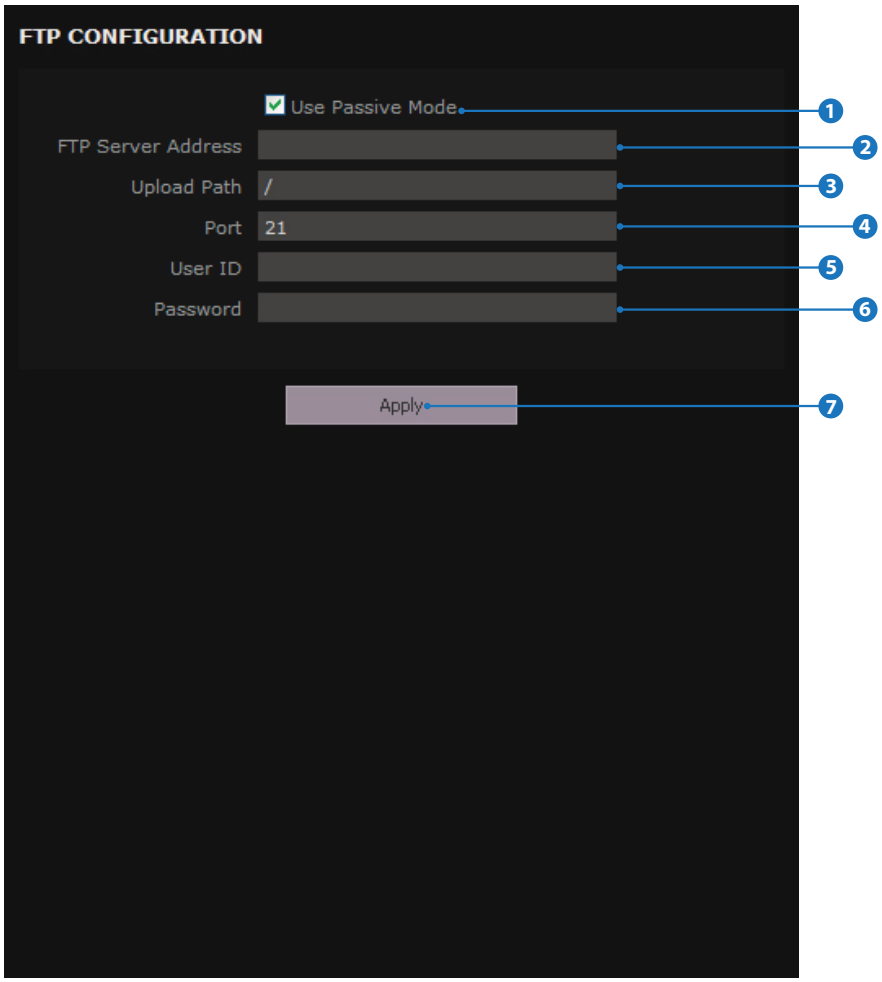
Image Transfer due to event is configured by setting Image transfer rate and Pre/Post alarm duration.

	Descriptions
Number of Image	Define Number of image transferred per second.
Pre-alarm Duration	Define duration of image transfer before an event.
Post-alarm Duration	Define duration of image transfer after an event.

※ Range of Pre/Post alarm duration can be changed according to Number of image setting.

4 Click 'Apply' to make above setting effective.

Setup -
FTP Setup



To transfer/save the image to the relevant sites through FTP, then FTP needs to be setup.

1 Use Passive Mode
Check it to use Passive mode for FTP transfer. If it is not check, the transfer becomes Active Mode. However, if you select active mode, it is possible that there might be problems due to the firewall. Consult with your network manager.

※ In Active mode, the FTP transfer might not work due to the firewall. In this case, ask to the network administrator.

2 FTP Server Address
Define FTP Server IP Address. If IP Address form is incorrect, a Message box will be shown to try again.

3 Upload Path
Define a path in FTP server to store video. For the path name, English Alphabets, numbers and special characters **(** / ~ ` ! @ $ ^ ( ) _ - { } [ ] ; , **)** can be used.

4 Port
Define the FTP Server Port. If Port is not appropriate, it is impossible to access to FTP Server.

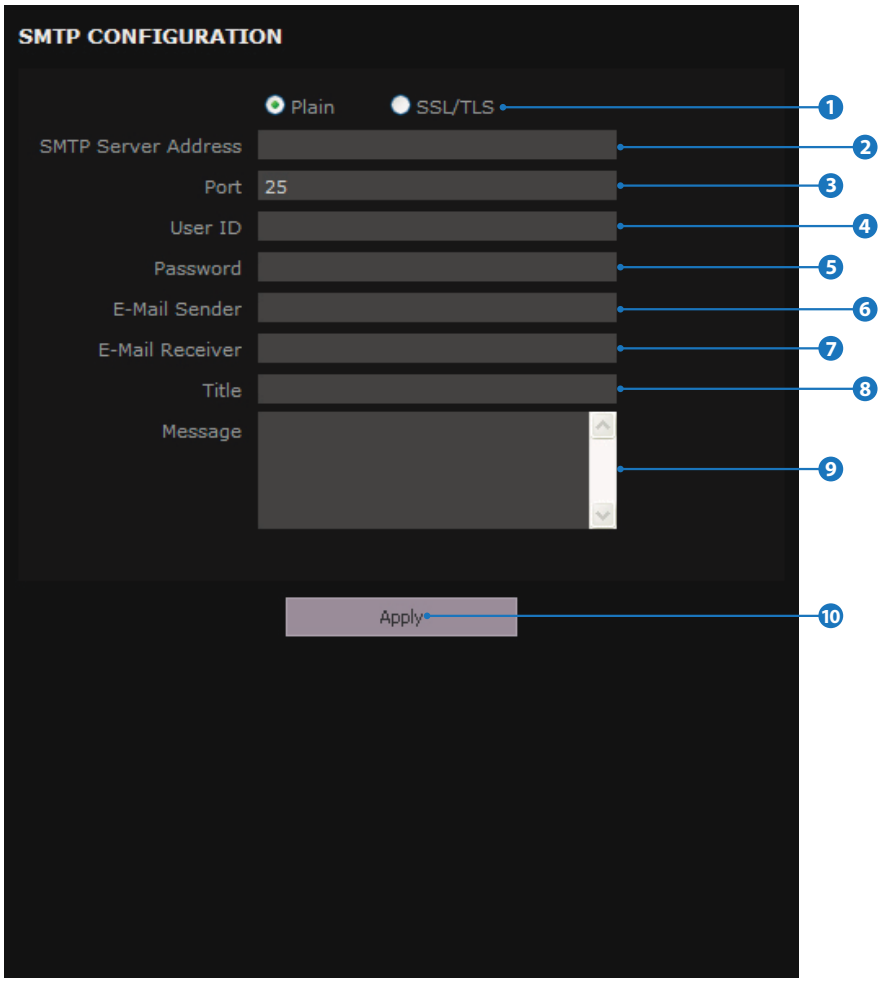
5 User ID
Define User ID to access to the FTP Server. Fill out the correct User ID registered in the FTP Server.

6 Password
Define Password to access to the FTP Server. Fill out the correct Password registered in the FTP Server.

7 Click 'Apply' to make above setting effective.

※ Refer the above screen image for the example.

Setup -
SMTP Setup



To send/save the image to the relevant sites by Email, SMTP needs to be setup.

1 Plain, SSL/TLS
Select Security mode of SMTP from Plain or SSL/TLS. After checking account setup of your SMTP Server, you may select one.

2 SMTP Server Address
Define the SMTP Server Address. If the IP Address form is incorrect, a Message box will be shown to try again.

3 Port
Define the Port used in the Plain or SSL/TLS security mode in the above.

4 User ID
Define the User ID to access to SMTP Server. Fill out the correct User ID registered in the SMTP Server.

5 Password
Define the Password to access to SMTP Server. Fill out the correct Password registered in the SMTP Server.

6 E-Mail Sender
Define the e-mail address of E-Mail Sender. It will be displayed as the sender when the camera sends an E-mail.

7 E-Mail Receiver
Define the e-mail address of E-Mail Receiver. It will be displayed as the Receiver when the camera sends an E-mail.

8 Title
Define the title of the E-Mail when the camera sends an E-mail.

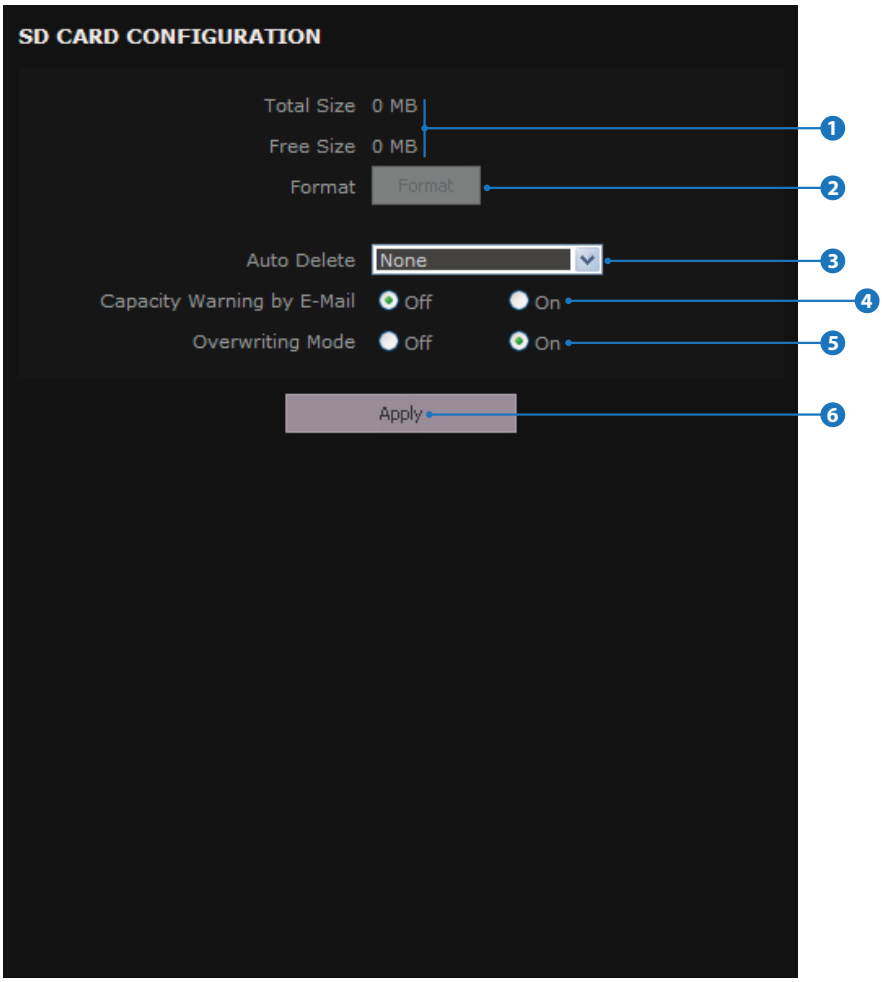
※ The title of the Email is limited to 40 characters including the spaces.

9 Message
Define the contents of E-Mail when camera sends an E-mail.

※ The message of the Email is limited to 40 characters including the spaces.

10 Click 'Apply' to make above setting effective.

Setup -
SD CARD Setup



1 Total size / Free size
Total capacity of SD card and the remainder of it are displayed.

2 Format
Delete the all contents that stored in SD card.

※ If the SD card doesn't applied, 'Format' button will be deactivated.

3 Auto Delete
Select the period for Auto delete. The image data stored before period will be deleted automatically.

NONE	Do not use 'Auto Delete'.
1 Week	Delete all stored image older than 1 week from 00:00 today.
1 Month	Delete all stored image older than 1 Month from 00:00 today.
1 Year	Delete all stored image older than 1 Year from 00:00 today.

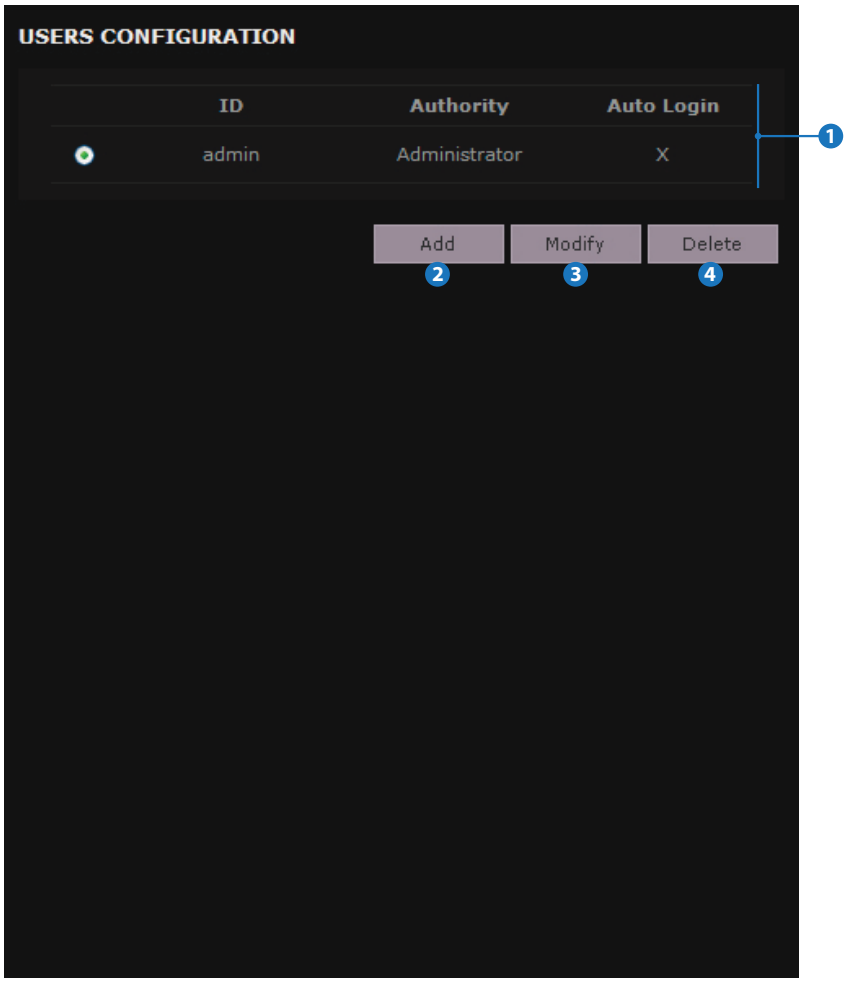
※ It is noted that this function will be executed everyday to delete data before designated period.

4 Capacity Warning E-mail
If it is set ON and remained space of SD card reach to less than 8MB, a warning e-mail will be sent to the e-mail account set in SMTP menu.

5 Overwriting Mode
If it is set ON and remained space of SD card reach to less than 8MB, new data will start to be overwritten on the oldest data. However, if it is set OFF and remained space of SD card reach to less than 8MB, image recording will be stopped.

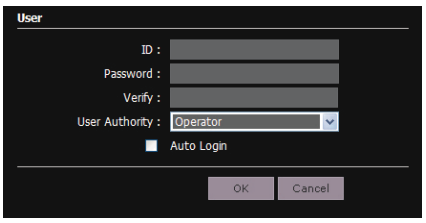
6 Click 'Apply' to make above setting effective.

Setup -
Users Setup



1 Users
List all the user accounts for authentication.

2 Add
Register a new user



ID	Enter a new user ID except Admin since it exists.
Password	Enter the user Password.
Verify	Enter the user Password again for verification.
User Level	Select Operator or Viewer. • Viewer : Only monitoring is allowed. • Operator : Most of the functions are allowed except 'Setup'. • Administrator: All functions are allowed.
Auto Login	If you check the auto login for an account, this account becomes the public account. From the next login, everybody can access the camera using this account without authentication. Only one account can have the Auto Login.

※ The ID and Password are limited to 10 characters.

3 Modify
Modify the information of the user accounts registered. For admin account, only Password and Auto Login function can be modified.

4 Delete
Delete the selected user account. Admin account cannot be deleted.

Setup -
Date/Time Setup

1 Current Date & Time
Shows the current date and time setting in the Camera.

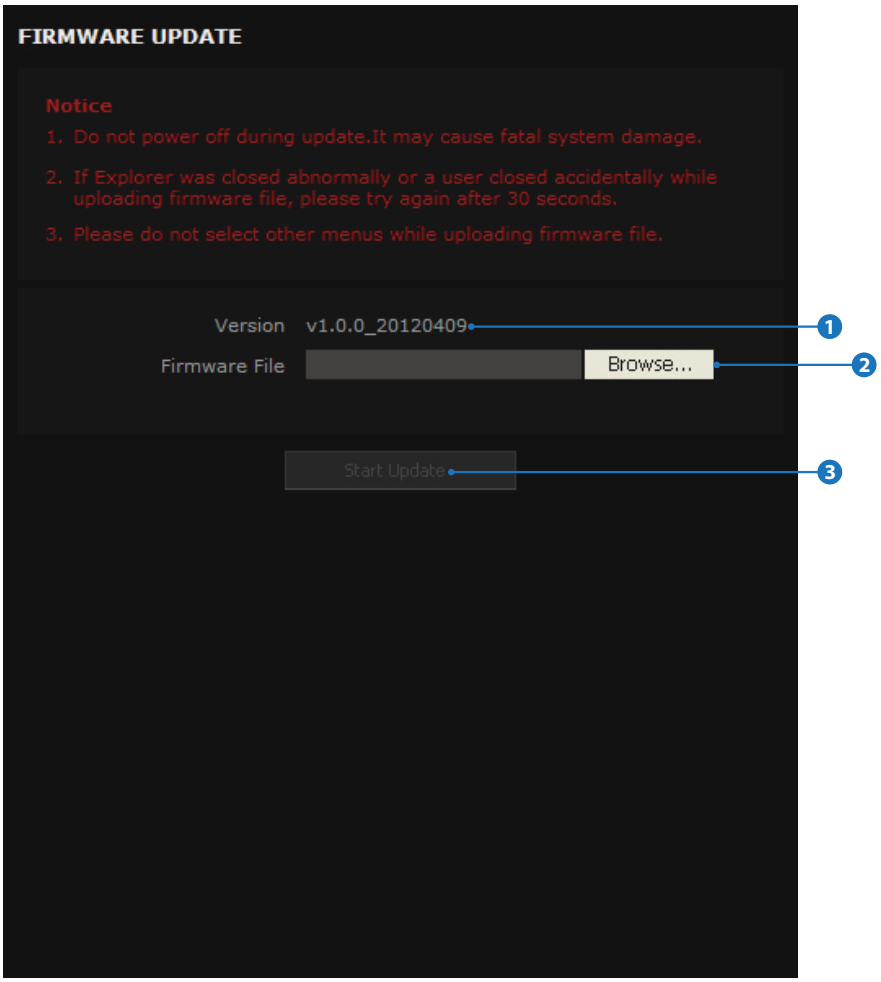
2 Synchronize with my computer
Set the date/time using those of PC currently connected.

3 Setup manually
Set the date/time by typing manually.

4 Synchronize with the time server
In this mode, date/time is automatically updated using the Time Server selected. After selecting the Time Zone properly, Time Server must be selected. However, if you want to assign a time server not in the list, select Manual. Once synchronization is configured successfully, the time and date will be updated every 1 hour automatically.

5 Click 'Apply' to make above setting effective.

Setup -
Firmware Update


FIRMWARE UPDATE
Notice
1. Do not power off during update.It may cause fatal system damage.
2. If Explorer was closed abnormally or a user closed accidentally while uploading firmware file, please try again after 30 seconds.
3. Please do not select other menus while uploading firmware file.
Version v1.0.0_20120409
Firmware File
Browse...
Start Update
1
2
3

1 Firmware Version
It shows the current Firmware Version in the system.

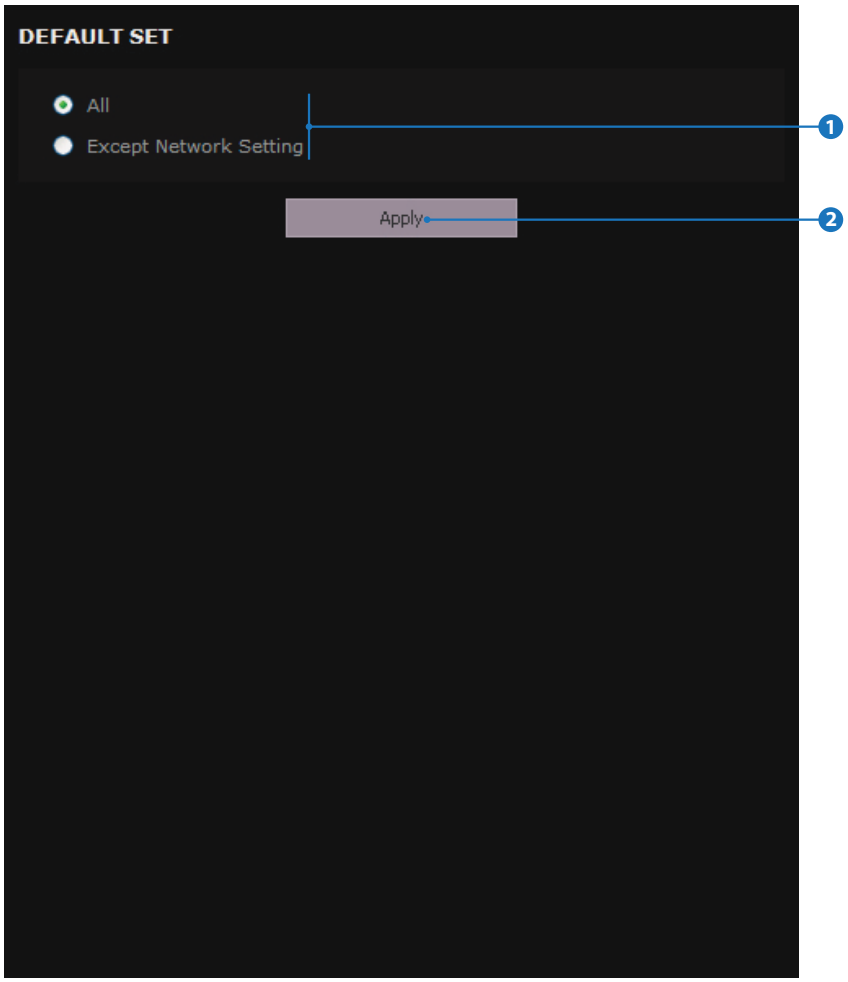
2 Firmware Filename
Designate the Firmware file name in your computer by clicking [Browse…] button.

3 Start Update
Click this button to start update. Progress of uploading will be displayed using Progress Bar. If you assign the wrong file name, an error massage will be shown.

Warning:

1. Do not turn off the power of camera during the Firmware update. Otherwise, the system can be stuck to be unstable. If updating is finished, the system will be rebooted automatically.
2. Please make sure to check the 'Notice' shown on screen. If firmware update is completed, the camera will reboot automatically and 'Setup window' will be closed

Setup -
Default Set



1 Reset to the Factory Defaults

Return the setup to the Factory Default.

All	Reset all Settings to the Factory Defaults.
Except Network Settings	Except Network related settings, reset all others to the Factory Defaults.

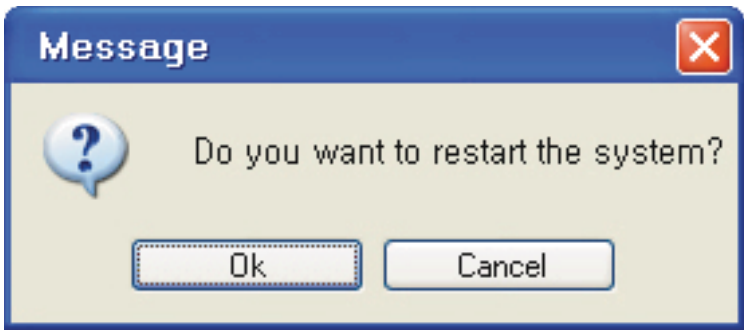
※ Warning:

If you click 'Apply', you will lose all setting data. If needed, please, make a note for further installation.

2 Click 'Apply' to make above setting effective.

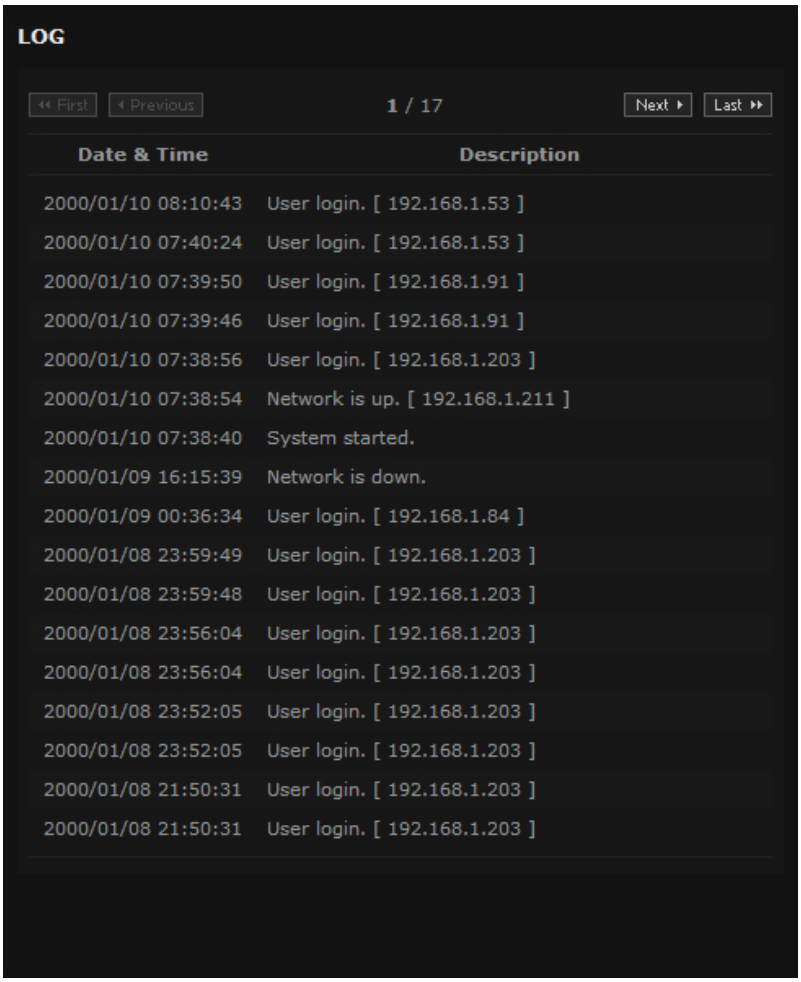
※ It takes approximated 4 minutes after clicking 'Apply' for the Default Set.

Setup -
Restart



If you click the 'RESTART' menu, a message box will be shown to confirm. Click the 'Ok' button to restart.

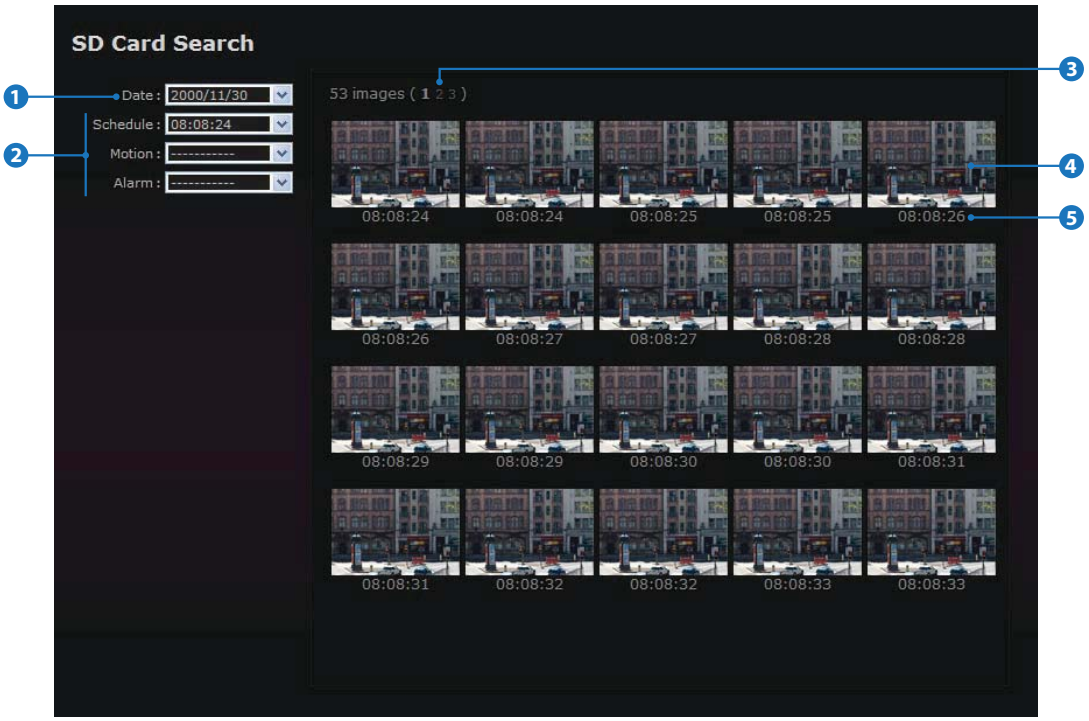
Setup -
Log



System Start, Network Connection Status(Including IP Address), Changing System Time, Changing Video Setup, Network Setup and Event(Alarm / Motion) Alert will be recorded.

1000 PCS of Log can be stored and the recorded data won't be deleted.

SD Card Search - Search



1 Date of stored image
Choosing the date to find the stored events.

2 Stored Events(Schedule / Motion / Alarm)
The interval of stored time and number of stored images in the Event Setup can be different.

3 Page No. of searched Images
The latest page will be loaded at the head.

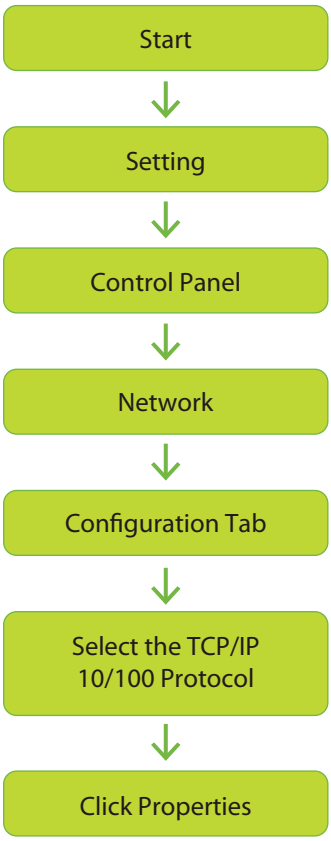
4 Stored Images
Image will be stored by value at CH No. 2 in 'Setup>Video configuration'. By clicking the image, see the image on the larger screen.

5 Stored Time of Images
The interval of stored image can be setup depending on the each Events.

Appendix
A : Current TCP/IP Settings

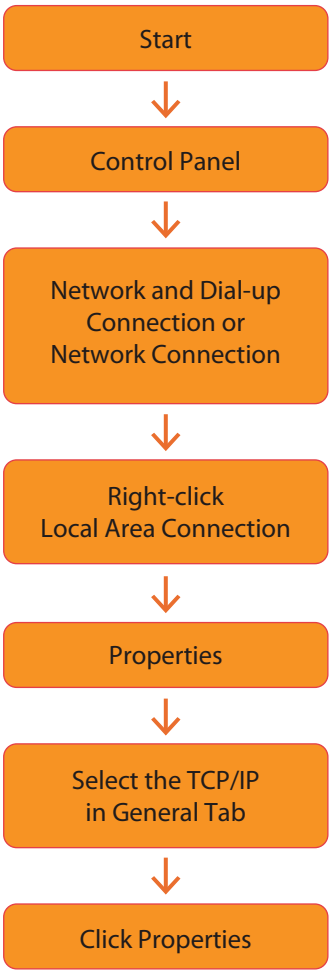
If your IP settings are obtained automatically, you could use the MS-DOS prompt (or Command Prompt) to determine your IP address. For information on how to do this, please read the FAQ.

1. Windows 98 / ME Users



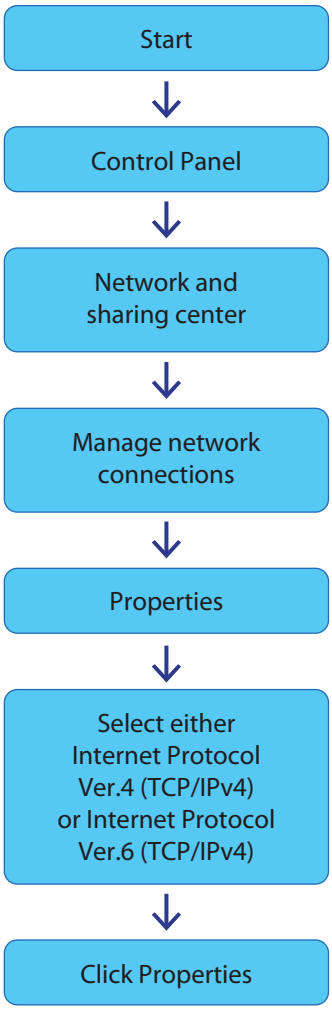
Note the settings under the IP Address, DNS Configuration, and Gateway tabs

2. Windows 2000 or XP Users



Under the 'General' tab of the TCP/IP Properties you will see your IP address information.

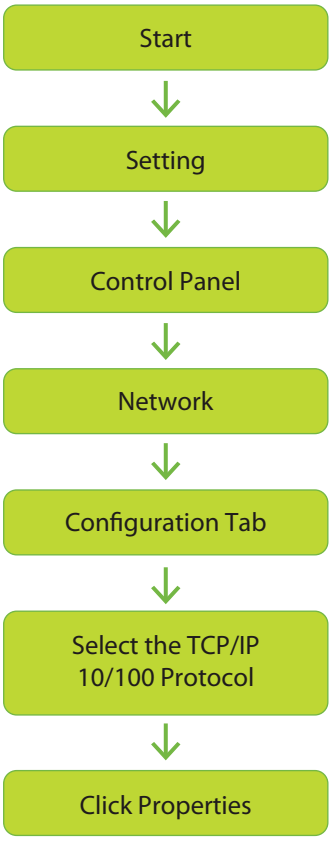
3. Windows Vista or 7 Users



Under the 'General' tab of the TCP/IP Properties you will see your IP address information.

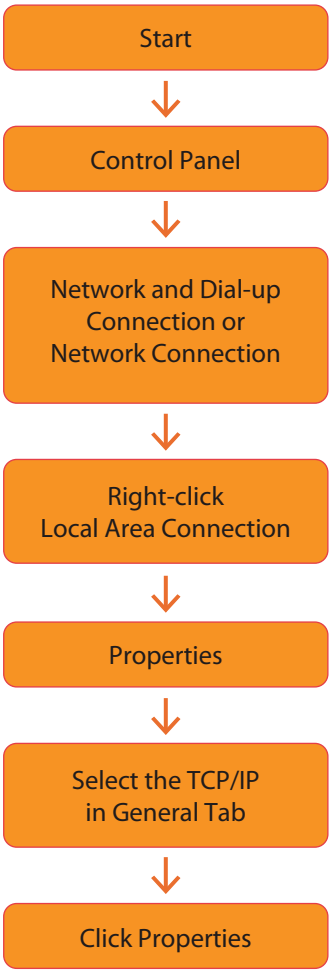
Appendix -
B : Changing IP address and subnet mask

1. Windows 98 / ME Users



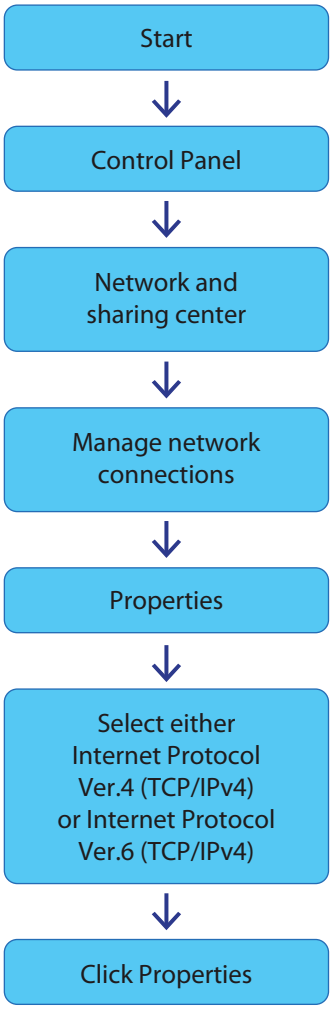
Select 'Use the following IP address' and change the IP address and Subnet Mask.

2. Windows 2000 or XP Users



Select 'Use the following IP address'

3. Windows Vista or 7 Users



Select 'Use the following IP address'

Appendix -
C : Port Forwarding

After assigning the IP Camera a web server port and video server port you must use Port Forwarding. (for cases A, B)

Please consult your router's user guide on how to correctly configure Port Forwarding.

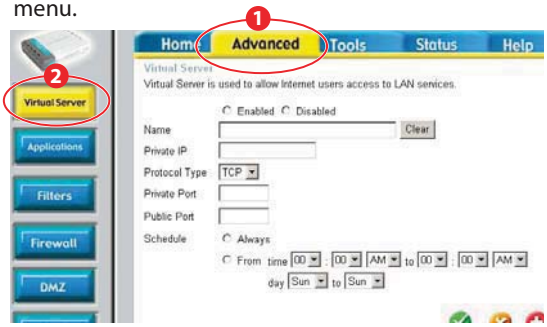
For your convenience, we have provided two example configurations.

1. For D-Link DI-604 broadband routers:

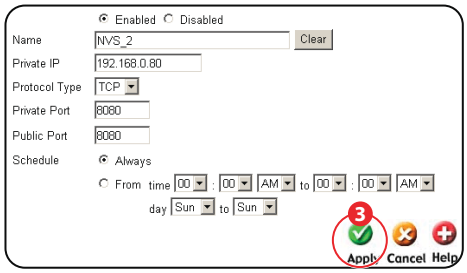
1) Open a web browser and type http://192.168.0.1 into your Address bar. (the default IP address to access the router)

2) You will have to supply your User Name and Password to log onto the router. Default from factory.
(User Name: admin Password: [leave blank])

3) Select the "❶Advanced" tab and click "❷Virtual Server" menu.



4) Click "❸Apply" button after inputting proper values. The example is as below



Enabled / Disabled	Select "Enabled".
Name	Input IVS name.
Private IP	Input IVS address.
Protocol Type	Select "TCP".
Private Port / Public Port	Input IVS Web Server Port.
Schedule	Select "Always"

5) If 'Setting Saved' shows, click [Continue] button.

6) With the same method as above, add Video Server Port.

7) The Web Server Port, Video Server Port and 2 Audio Ports shows in "Virtual Server List" as below.

Virtual Servers List

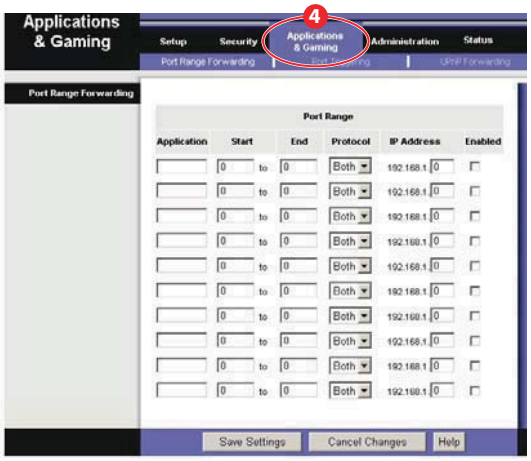
	Name	Private IP	Protocol	Schedule
☑	NVS_2	192.168.0.80	TCP 8080/8080	always
☑	NVS_2	192.168.0.80	TCP 7777/7777	always
☑	NVS_2	192.168.0.80	TCP 7778/7778	always
☑	NVS_2	192.168.0.80	TCP 7779/7779	always
☑	NVS_2	192.168.0.80	TCP 7780/7780	always

2. For Linksys BEFSR41 Cable/DSL routers:

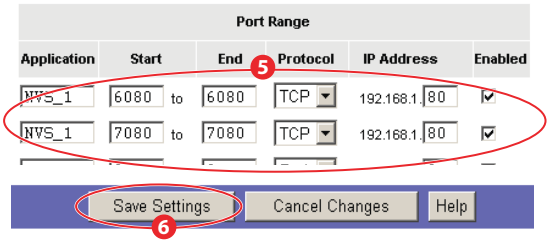
1) Open a web browser and type http://192.168.1.1 into you Address bar. (the default IP address to access the router)

2) You will have to supply your User Name and Password to log onto the router. Default from factory
(User Name:[leave blank] Password: admin)

3) Select "❹Applications & Gaming" from the menu bar.



4) Input port numbers in "❺Port Range" as below and click "❻Save Setting" button. Both of Web Server Port and Video Server Port should be added. The example is as below.



Enabled / Disabled	Input IP Camera name.
Start / End	Input IP Camera Web Server Port and Video Server Port. Start should be same as End. Both of Web Server Port and Video Server Port should be added.
Protocol	Select "TCP" in Protocol option.
IP Address	Input IP Camera IP Address.
Enabled	Check the square.

Appendix -
C : Port Forwarding

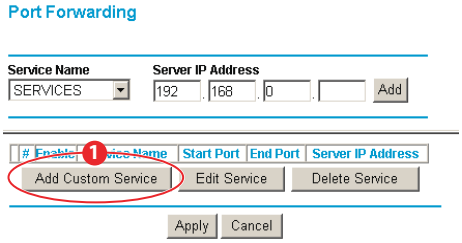
3. For Netgear RP614 routers:

1) Input http://192.168.0.1 in address bar of web browser. http://192.168.0.1 is the default IP address.

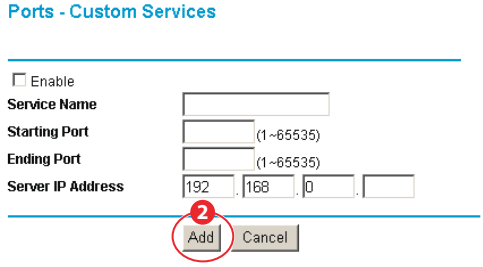
2) If it asks ID and password, input admin as ID and password as password.

3) Click "Port Forwarding" in "Advanced".

4) Click "❶Add Custom Service" button in Port Forwarding page.



5) Input proper values in "Ports - Custom Services" page as below.



Enable	Check it.
Service Name	Input IP Camera name.
Starting/ Ending Port	Input IP Camera Web Server port. Starting Port should be same as Ending Port.
Server IP Address	Input IP Camera IP Address.

6) Click "❷ Add" button.

7) With the same method as above, add Video Server Port.

8) Click "Apply" button to finish Port Forwarding.

Appendix - FAQ

1. My POWER light is not on?
Power is not being supplied to the unit. Please use the power supply shipped with the unit and verify that a power source is active from the attached power outlet used to connect the adapter. You can test this by plugging in any other electrical device and verify its operation. After using the power supply shipped with the product, checking the power source, and reinserting the power connector into the IP Camera, please call our Support Center. The power supply may be defective.

2. My ACTIVE light is not flashing?
Verify the power supply to the unit. Power off the unit and back on again, wait 1 minute, if the ACTIVE light still does not begin to flash, you will have to set the unit to its factory default (THIS WILL DELETE ANY CONFIGURATION AND SET THE UNIT TO THE FACTORY DEFAULTS). Power on the unit and insert the end of a paper clip into the small recessed opening on the back of the unit. Use the clip to press the button located within that opening.

3. My LINK light is not flashing or solid?
Verify the cable connection. 99% of the time the cable's connection to the unit is causing this problem. Try using a different network cable or crossover cable (for PC connection only). Try reinserting the cable, if this still doesn't solve the problem call our Support Center.

4. I can access the video server on my LAN, but not from the Internet.
Verify that your router (if applicable) has port forwarding properly configured. If accessing from our DDNS service, verify correct serial number. Firewall issues may prevent user access.

5. How do I open an MS-DOS or Command Prompt?
- Windows 98 / ME Users :
  Start > Programs > Accessories > MS-DOS prompt
- Windows 2000 / XP Users :
  Start > (All) Programs > Accessories > Command Prompt

6. How do I find out my IP address information if my settings were automatically detected?

Windows 98 / ME Users

1) Open an MS-DOS Prompt
2) At the prompt type: "winipcfg" (without the quotation marks)
3) Use the drop down list to select your 10/100 Ethernet Adapter (not a PPP adapter)
4) Now you will see your IP Address, Subnet Mask, and Default Gateway information
5) For DNS information contact your Internet Service Provider

Windows 2000 / XP Users

1) Open a Command Prompt
2) At the prompt type - "ipconfig /all" (without the quotes)
3) Near the end of the information supplied, should be your current IP address, subnet mask, default gateway and DNS servers

7. I can't connect!!
In the case of a connection failure.
Modem Reboot > Modem Reboot Finished > Router Reboot > Router Reboot Finished > IP Camera Reboot > IP Camera Reboot Finish > Verify DDNS and IP Camera connection, if applicable.

8. How do I "PING" an IP address?
1) Open an MS-DOS (or Command) prompt
2) At the prompt type - "ping xxx.xxx.xxx.xxx" (without the quotes and replace the "x"s with an IP address)
3) Press Enter

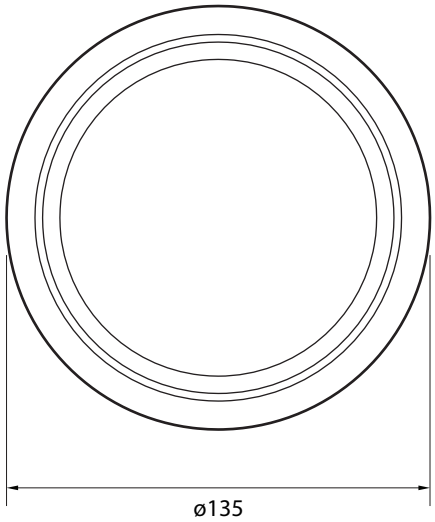
9. I'm accessing my video server remotely over the Internet and the video stream is choppy, is this normal?
Yes. The frames per second received remotely are determined by your bandwidth capabilities both at your site where the IP Camera is installed and your remote location. The lower of the two sites will determine how fast your video stream is received. It is recommended to have at least a 256Kb/sec upstream connection from the site where the IP Camera is installed. Lower speeds will operate properly, but provide poor remote performance. The Faster the Internet connection at both ends, the faster the video stream.

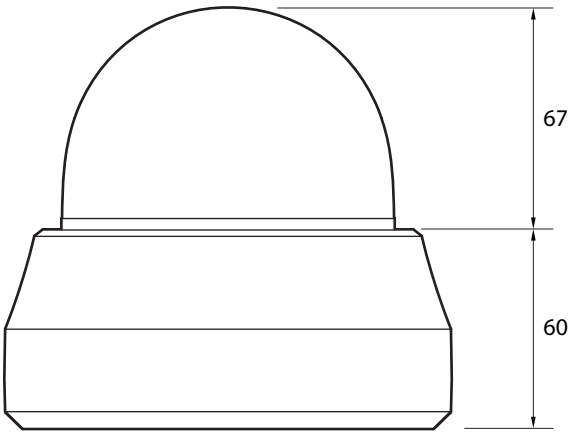
10. How do I enable or check ActiveX on my browser
Open Internet Explorer > Tools on the menu bar > Internet Options > Security Tab > Custom Level > Scroll down and verify that you are prompted or have enabled ActiveX controls and plug-ins to be downloaded and executed. > click OK > restart browser.

11. How do I reset the unit to factory defaults?
On the underside of the unit you will find a recessed opening located near the top-left side of the label. Power ON the unit and use a paper clip to push the reset button within that opening. You should then see the ACTIVE light turn off and after a few seconds the ACTIVE light will begin to flash, signifying a successful reboot. If the ACTIVE light does not turn off after depressing the reset button, please try holding the button in for a few seconds and releasing. YOU WILL LOSE ALL DATA THAT HAD BEEN ENTERED PREVIOUSLY AND THE IP CAMERA WILL BE SET TO ITS FACTORY RESETS.

Specifications -
Dimension

Unit: mm





GENIE CCTV LTD.
CCTV House, City Park, Watchmead, Welwyn Garden City, Hertfordshire, AL7 ILT
Tel: +44 (0) 1707 330541 Fax: +44 (0) 1707 330543
www.geniecctv.com

Edition. GN-January 2014